

CBS NEWS - COLUMBIA DISASTER - 9:31 A.M E.T - 3:00 P.M E.T (2-1-2003)

<https://www.youtube.com/watch?v=dWC7VAB3gf8> (<https://www.youtube.com/watch?v=dWC7VAB3gf8>)

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From Saturday, February 1st, 2003 CBS NEWS breaking news coverage of the Columbia Space Shuttle breakup killing the crew of 7. STS-107 was wrapping up a 16 day mission in space, communication was lost at 9:00 A.M E.T, just 16 minutes before landing and breaking up over Texas.

- Coverage runs from 9:31 A.M E.T - 3:00 P.M E.T

THE STS-107 Crew:

Commander: Rick D. Husband

Pilot: William C. McCool

Mission Specialist 1: David M. Brown

Mission Specialist 2: Kalpana Chawla

Mission Specialist 3: Michael P. Anderson

Mission Specialist 4: Laurel B. Clark

Payload Specialist 1: Ilan Ramon

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procedures and ordered them to maintain to retain i should say all of the records translate for us what does that really mean the whole point here is to preserve the information that came from the shuttle if you're going to reconstruct an accident you have to know what the data was leading up to it and that's what they're doing and it's a complicated procedures you can see all of those screens those are computers that are all hooked up on a high-speed fiber optic network it's an enormous amount of data from the shuttle all through the flight every second during the descent now one thing i'll point out russ is that at the point when they lost communications uh the communications were spotty and that's not unusual when you get a lot of heat around the orbiter a plasma builds up it builds up around the vehicle and sometimes it makes the communications to nasa's communication satellite overhead a little bit spotty and intermittent and i didn't think anything unusual of that at that point of course when they didn't re-establish contact is when you begin to get concerned of course now we're nearly 14 minutes past the projected touchdown time the shuttle is definitely not in the air at this point that's for sure it has definitely gone down somewhere we just we don't know the details are nowhere it is 9 30 here on the east coast we remind folks why we have broken into programming this morning the space shuttle columbia was due to land at 9 16 eastern time this morning about 14 minutes ago mission control lost contact with shuttle columbia at 9 00 eastern time 30 minutes ago highly unusual as bill harwood says bill bill hardwood standing by with us at the kennedy space center in florida let's go through and again want to plan to people that we know nothing officially just yet but let's kind of go through the possible scenarios here you do say there is a chance that the astronauts bailed out there is a bailout system on yeah there's a bailout system rust but i can't imagine them able to use it uh it would require a certain type of failure scenario that leaves the shuttle in a steady and controlled flight which means you still have control over the vehicle uh to get into a scenario where you

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uh to get into a scenario where you listen to james harden securing all information and data and that's james hartsfield uh commentator mission control we did have some reports from witnesses in texas that uh one report to us via the internet indicated that this person saw debris in the sky similar to what we might remember from when the mere space station the russian mir space station re-entered the atmosphere a few years ago and broke up because of aerodynamic stresses uh but of course we haven't seen that ourselves yet so i can't i can't confirm that but that is what one witness reported catcher would listen to the space center just to the mix of mission control is a moment ago let's let's go back again if we can through the possible scenarios here the bailout system you say there's some issues involved in that you are convinced that the shuttle is not in the air right now what makes you so convinced of that russ the shuttle is a glider uh when it comes home uh it has some small maneuvering jets but it weighs 120 tons and it has no engines you know that's why they're so very careful in picking when they're going to land to make sure the weather is right because they can't fly around the orbit is set up so that it brings them right over the space center and they have to land it doesn't have the kind of lift that a large airliner does with bigger wings or whatever it drops like a rock and matter of fact a lot of astronauts describe it as a flying brick in that sense uh being 16 minutes past touchdown it's definitely not in the air there's no question about that it has no engines it can't stay in the air it will come down the issue is where and what happened and of course at this point uh this isn't a spacecraft that can just drop out of the sky and land at a runway between houston and florida the trajectory is designed to minimize heating and to bring them to one point and that's this runway at the kennedy space center uh in in theory i suppose in some contingency situations you could bank around and try for a runway somewhere else in florida but certainly that hasn't happened the radar system here would have picked it up within hundreds of miles of florida and they never did so it is not on a runway

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they never did so it is not on a runway i can tell you that as we said this was a 16-day scientific research mission you you talked about some problems that the shuttle had on takeoff but during the mission were there any problems reported on board the shuttle not any at all as a matter of fact colombia has a reputation for being hard to get off the ground for lots of pre-launch problems but once it's in orbit no problems at all and that was the case here the space shuttle itself i'm just mentioning it again because it is out of the ordinary anytime you strike those those protective areas on the shuttle that's obviously a source of concern right a very good point to mention bill let me ask you from a procedure standpoint when we talk about a shuttle mission what would be considered the most difficult part of the mission when the shuttle goes up when it's in space or when it's landing well you know that's one of those things russ i think if you've ever seen a shuttle launch anybody would say the launch because you're you're accelerating a vehicle it was loaded with fuel on the launch pad it weighs four and a half million pounds let's listen to mr hart's field one more mission control have declared a contingency as a communications was lost with the space shuttle of columbia during its descent from orbit enroute to landing at the kennedy space center in florida the last communications with columbia occurred at about 8 a.m central time as it was above the north central texas area at an altitude of approximately 200 thousand feet any debris that is located in the vicinity of the north central texas area that may be related to the shuttle contingency should be reported to local law enforcement who will then report to nasa it should be avoided debris could be potentially hazardous due to toxic substances that are used as propellants on the space shuttle and russ james hartsfield what they're talking about there is some of the propellants on board the orbiter it's possible some tanks could have survived the breakup those propellants are extraordinarily toxic as a matter of fact and they're just warning people that if they find something like that to stay away from it sure bill you were telling us about hold on one second let's listen one more time he's just saying they've alerted rescue teams i was saying russ obviously the

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teams i was saying russ obviously the launch is considered the most dangerous phase of flight when it's loaded with fuel it weighs four and a half million pounds goes from zero to 100 miles an hour straight up in about 10 seconds and at the end of eight minutes it's accelerated to 17 000 miles an hour that's eight times faster than the bullet from an assault rifle uh so if you think about that uh anybody would would naturally

assume that the launch is the most uh dangerous portion of a flight but when you put the whole thing in perspective it's all quite dangerous once you're in orbit you're going five miles per second in a vacuum when you come home you're trying to slow down from that tremendous velocity and i think people you know it's easy to watch science fiction movies and see high-speed uh spacecraft in special effects but when you really stop and think about five miles per second what that actually means for a vehicle that weighs 120 tons i'm always amazed that it works at all it's a very technologically daunting thing during the entry of course the real issue is heat and aerodynamics so you you generate tremendous friction in the atmosphere as you come back down that's why the bottom of the space shuttle is equipped with the black tile they are more heat resistant the upper parts of the shuttle have the the white blankets or tile you don't experience nearly as much heat there the areas where you get the maximum heating is along the leading edges of the wings they call if i can get this model oriented a little better the leading edges on both sides and of course the nose area that's where you get the most heat when they drop into the atmosphere they maintain an angle of attack of about 40 degrees so that it's flying like that and then as they get down lower they'll begin to do some biking maneuvers to burn off some of that energy before they land contingencies our official information is going to come from mission control in houston so what's going to happen anytime they speak ladies the debris could be hazardous due to toxic propellants that are used on board the space shuttle again any debris that is located in the dallas fort worth i don't i'm not sure what officially

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i don't i'm not sure what officially they can add when a flight director declares a contingency that means that he is declaring the mission in an emergency state they clearly believe that that the shuttle uh has been lost at this point uh but of course as you say you know you can't rule out a miracle but that's that's what we're talking about now wes can you rerun that can we can we see the video again that we had earlier coming down from north texas yeah yeah i believe we can let's go ahead and roll out of control and again this is video that was shot over north texas today you see something coming out of the sky and i can tell you from looking at that i have seen i'm an amateur astronomer i've seen video of meteor daylight meteor fireballs and things like that this is clearly a machine of some kind that's breaking up and only something as big as a shuttle or a large station component something like that could produce a debris pattern like that in my experience anyway we also have video of the shuttle as it was taking off 16 days ago billy went over this earlier but go ahead and tell us once again who was on board this flight the commander's rick husband he's uh an air force colonel 45 years old he's flown one flight before this was his second flight and his first as commander his pilot was william willie mccool one of the best names for a test pilot you'll ever come across commander mccool a navy commander 42 years old the flight engineer was kalpana chavla she has a phd now she's flown one time before this was her second flight she was sitting in the seat directly behind the pilot and commander in the center the flight engineer on a shuttle helps read instrumentation and and just look over their shoulders basically to help out during ascent as well as during entry uh other other members of this crew were payload commander michael anderson he was making his second flight uh david brown who was a physician and laurel clark another physician both making their first flights and elon ramon uh the first israeli to fly in space was on board this mission and of course this flight's generated tremendous interest in israel as he's been operating a camera that's helped to study the transport of dust

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helped to study the transport of dust particles from african dust storms helping to come up with better ways to predict the climate in the mediterranean basin a very successful mission want to tell folks at home that we're now getting word that president bush is scheduled to make a statement in just a few minutes so we may cut out of our conversation here with you uh bill to go directly to the president i understand that because colonel ramon from the israeli air force was on board this flight that security was beefed up somewhat because of the concern of a terrorist threat i say that only because that was concerned before the flight we don't have any information now that anything like that may have been involved here but what can you tell us about that beefed up security well that's true you know ever since uh early last year nasa implemented a post september 11 security plan that really tightened things up here and although they said it was business

as usual for this flight uh obviously everybody was a little bit more alert uh the launch was obviously the when the shuttle sitting on the pad loaded with fuel that that can be thought of as a pretty inviting target half million gallons of explosive hydrogen and liquid oxygen on board but of course the launch was flawless there were no problems at all they have a big no-fly zone it's patrolled by fighter jets they have radars and rust for entry um it's really security is not considered an issue until the shuttle gets within about fifty thousand feet up above the kennedy space center at an altitude of two hundred thousand feet uh i don't even know that that a government could shoot down a vehicle like a shuttle at that altitude so security is not an issue in a situation like this only when it's closer to the runway when it's back down in the realm of normal human affairs with reasonable speeds and altitudes would that be an issue but i don't think so in this case i understand on january 28th the anniversary of the challenger crash this crew observed a moment of silence that's right russ uh nasa the entire agency always observes a moment of silence at 11 38 a.m on january the 28th that's when the challenger took off back in 1986 and of course those crew members were killed that mission ended 73 seconds after liftoff when the

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after liftoff when the booster failure caused the tank to rupture and then the shuttle broke apart in the atmosphere and the crew was lost that was 17 years ago this year and the crew in orbit as well as nasa employees here on the ground observed a moment of silence at 11 38 a.m as they always do we've been talking about what's going on at mission control i have to ask you bill again behind the scenes we have the families of these astronauts who obviously are very concerned right now as to what's going on in a situation like this and granted we haven't had a situation quite like this before in the 42 years of american space flight what is nasa doing with those families what what do you think they're being told what's going on well they hear the same nasa commentator you and i do i believe all the families are here at the kennedy space center uh they had planned to meet their family members it takes them about an hour and a half on a flight like this to get them off the shuttle and back to crew quarters uh where the crew has medical exams and i believe they were planning to have lunch with their families uh over here at crew quarters at the kennedy space center they hear the same loops we do i'm sure they're flight controllers here securing all information data and notes pertinent to the descent of the space shuttle columbia this morning from orbit the last communications were received from the space shuttle columbia at approximately 8 a.m central time as it was an altitude of about 200 000 feet above north central texas enroute to a planned landing at the kennedy space center in florida at 8 16 a.m central time search and rescue teams in the downtown island tracking station that would see a shuttle within several hundred miles of the landing site and of course those radars never picked up anything so the shuttle did not get this far uh whatever happened to it obviously happened at altitude at a high rate of speed in the video we've seen suggest the spacecraft broke apart above texas let's go again to that video that we have that was shot over north texas this morning of something that appears to be coming from the sky as we recap what's going on today why we're breaking into what we have broken into programming this saturday morning nasa has now declared an emergency after losing communication with the space shuttle columbia just minutes before it was to land this morning you're looking at video here once again that was shot somewhere over north texas and there is speculation that this could be the shuttle breaking up and falling to earth nasa has ordered

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and falling to earth nasa has ordered flight controllers to pull out emergency procedures and to retain their records the shuttle had seven astronauts on board for a two-week science mission including six americans and one israeli as it's not really emergency procedures because at this point there's nothing the flight controllers can do for the shuttle it is where it is the procedures they're doing is simply trying to preserve all the data in their computer system so that they can go back through it later to try to reconstruct what happens the shuttle sends back a tremendous stream of telemetry during launches and on orbit and during entry lots of data from temperatures sensors around the spacecraft hydraulic systems fluid temperatures all of that kind of stuff they want to go back and look at all of that obviously after the fact to try to reconstruct what happened somewhere in the telemetry they'll find that out there's no question about it one thing i was going to say russ

earlier is other things you have to think about on entry we talked about the trajectory the spacecraft flies and how important that is from the heating on the bottom of the spacecraft where it attaches to the external tank there's two areas where fuel lines go in when they get into orbit and the external tank separates away from the shuttle small doors have to close over that to protect that area they always test and make sure those motors worked i never heard anything about that so i assumed those doors were in fact closed as they need to be for an entry the only other issue that has ever come up during this mission of any significance at all was a bit of foam insulation from the shuttle's external fuel tank that came off during launch and hit in the area of the leading wing leading edge of the shuttle's left wing they get tremendous heat loads here on the leading edges of the wings and on the nose of the orbiter and obviously if there was any significant damage there that could be a factor in this we don't know that i'm not trying to suggest it it's simply the only thing out of the ordinary uh that's cropped up during this entire mission we're approaching the top of the hour here bill before we get there uh let me look at file type of a of a landing of a special here not sure which one uh this is uh that's columbia that's columbia bill is there anything character what characteristics does the columbia hat that the other shuttles don't have anything in particular any

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don't have anything in particular any quirks anything that astronauts talk about well you know it was the first shuttle rush it launched for the first time back on april the 12th 1981 i remember watching that launch from my college at the university of tennessee and marveling at the thing actually flew you know they never did a test flight they just launched it the first time uh with robert griffin and john young the commander on board columbia is the first shuttle is heavier than the succeeding shuttles you know as they built these they learned from the process and they made them lighter but colombia is a heavyweight orbiter it's one of the reasons that it doesn't go to the space station has not gone to the space station to date because it is heavy enough that it can't carry the kind of payloads that the other spacecraft the atlantis endeavor and discovery can carry to the space station but they had made it they continued to make upgrades on this shuttle to improve it to shave weight off where they could and as a matter of fact its next flight was going to the international space station in november carrying barbara morgan the backup to the teacher astronaut kristen mcauliffe who died 17 years ago this january the 28th on board the challenger disaster barbara morgan uh the first educator astronaut at nasa was here at the kennedy space center today she had been flying on a nasa jet flown by chief astronaut kent rominger who was flying approaches to the runway like they always do for landings just to make sure everything is okay so she was getting a bird's eye view of landing procedures and she was expected on the runway after landing to take a look at columbia which she was hoping to ride into orbit in november that obviously is not going to happen now we talk about this uh time and time again as far as the training these astronauts receive just how intense is it and how long does it take a long time russian for a mission like this a flight where you had so many experiments on board more than 80 research projects this crew was selected two and a half years ago the research components of it and they've been training ever since now the mission was originally scheduled to launch last summer and you might recall there was some concern about fuel line cracks last summer and they grounded the shuttle fleet as it turned out they shuffled up the launch schedule after they got that fixed and

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fixed and columbia slipped to january 16th of this year for launch and of course nothing obviously known wrong with the orbiter when they launched it they're very careful about that and the crew took the advantage of that break between july and this january to continue training and even to take a little bit of time off they said they actually enjoyed the break but you're right they're trained to a fever pitch and during this mission it obviously paid off they collected an enormous amount of data and the scientists said that virtually every experiment worked as planned bill harwood at the kennedy space center stay there it is now 10 o'clock here in the east coast we are you're watching a cbs news special report breaking story from nasa's mission control in houston nasa has declared an emergency after losing communication with the space shuttle columbia just minutes before it was to land the columbia was scheduled to land at 9 16 eastern time at the kennedy space center in florida that's about 45 minutes ago and officials lost contact with the shuttle around

nine o'clock 60 minutes earlier as it passed over texas the sound you're hearing behind me is mission control in houston let's listen in just for a moment in case there's some new information approximately 8 a.m central time this morning as it was descending toward a landing at the kennedy space center scheduled to touch down there at 8 16 8 16 a.m central time communications and tracking of the space shuttle was lost at 8 am as it was approximately 200 000 feet above the north central texas area search and rescue teams in the dallas fort worth area have been alerted any debris that is located in that vicinity that may be related to the space shuttle contingency should be avoided and may be hazardous as a result of toxic propellants that are used on board the space shuttle and should be reported to local law enforcement authorities [Music] you're listening to james hartford controllers in houston texas nasa has ordered flight controllers to retain all of their records the shuttle had seven astronauts on board for a two-week science mission including six americans in one israeli

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including six americans in one israeli the wives husbands and youngsters of the astronauts who had been waiting at the landing strip in florida were gathered together by nasa and taken to a separate place there is still no official word again official word on what has happened but nasa has put out a public advisory to avoid any debris that may have come from the space shuttle when we go back to that video video taken over north texas of something falling out of the sky not sure what it was at this point the orbiter was at an altitude of two hundred thousand seven hundred feet traveling at about twelve thousand five hundred miles per hour when contact was lost in 42 years of human space flight nasa has never lost a space crew during landing or the ride back to orbit right now i want to turn to my colleague here on the saturday early show gretchen crosston you have an eyewitness you want to talk to i believe we have a meteorologist who works for our cbs affiliate in louisiana rob perillo who witnessed this challenger or this columbia potentially coming down from the sky rob are you there with us on the phone yes i am could you tell us where you are in louisiana and what you saw basically we've seen the shuttle come in a number of times when it doesn't fly uh to the space station it comes in on a different orbit and it comes across southern louisiana and i'm i happen to be the chief meteorologist at our local affiliate so we kind of talked about it and anticipated and uh so coming in trade is an arrow and then uh the smoke plume seemed to spread out and uh saw multiple things on the video uh and what you're seeing there right now and then uh basically all that debris took a left-hand turn as it pretty much cross to look like i would say the texas louisiana border tough to tell where the trajectory of the debris may have gone but nonetheless heard a a fairly long protracted sonic boom like multiple devices actually making uh making re-entry rather than just one device so you actually heard something then we're looking at wire copy here out of dallas and the

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wire copy here out of dallas and the north texas area residents there say that they heard a big bang about the same time that the shuttle columbia disappeared and you're in louisiana i know this is on the border but you say you also heard the same sort of sounds yeah we normally hear the bang about five minutes after the shuttle passes overhead and is getting close to florida it takes that long for the sound wave to reach us and uh this time instead of one singular bang it was a long protracted maybe 10 15 seconds worth of multiple bangs indicating multiple projectiles entering the atmosphere so again didn't look good and knew something was wrong right right out of the box and then after what we're seeing on the video right now after this shot of the smoke plume curled hard to the left uh indicating that whatever debris was flying uh changed direction that may have been uh just because of the way uh the the aerodynamics of the debris that was flying uh but the uh the viewer in palestine texas also uh mentioned the same thing they saw the same thing from their aspect uh just to give you an idea lafayette's about a hundred miles from the texas louisiana border and uh we were probably bird dogging at about uh about 100 miles away probably pretty much at that point and rob give us a sense i know you say that you've seen several of these re-entries back into uh as they're coming in for landing but give us a sense how far up in the sky this is because we've been listening to bill harwood all morning saying that the altitude may have been 200 000 feet at this point obviously it was lower than that because you could see it well uh what we're looking at is the debris uh uh burning and the smoke plume from

there uh as far as i've calculated for our viewers in the past normally i say it's about 50 miles up when we can see it which is usually between san antonio and uh dallas and by the time it passes off to our east it's down to about 15 or 20 miles in elevation so this is the time when it's coming into the

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the time when it's coming into the atmosphere making its reentry and descending through the atmosphere and it's slowing down from anywhere from about mach 12 or 14 which is about 10 thousand miles an hour down to about five thousand miles an hour so what you're seeing right there is uh the debris going probably at about ten thousand miles an hour and uh if it's not coming in on a good angle or there may have been some sort of failure on board or or tile failure underneath i'm afraid our friends didn't have much of a chance rob i want you to take off your meteorologist hat for a moment and just put on your human nature hat not that they're one and the same but as somebody who watched this unfold what were you feeling in your heart when you were seeing this uh well unfortunately i knew soon as i saw the smoke flame going in different directions it it was something that got wrong i woke up my wife and and my daughter brought her outside and i had the video camera set up ready to go and my wife spotted it i locked onto it with the video camera and then uh then it kind of i had that challenger feeling uh all over again when you see uh more than one plume and and seeing it come in is a is a beautiful sight uh we've seen it come in at night a number of times it's the most beautiful thing i've ever seen uh meteorologically or astronomically speaking and uh seeing what we saw this morning we certainly knew there was something wrong and i immediately started making calls to nasa yes i can rob we want to thank you for joining us rob perillo meteorologist at our cbs affiliate in lafayette louisiana thanks for your insights this morning thank you gretchen gretchen there's a gentleman on the phone named sam knight we're going to speak with him from fort worth tech worth texas mr knight are you there yes i am tell me what you saw this morning well my wife and i went outside to watch the shuttle come over for worth at 803 is when it was scheduled we walked out into the yard and were told to kind of look toward the north and we kept looking and couldn't see anything

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kept looking and couldn't see anything so we moved around the side of our house and we're cl a lot of planes come over our house going to the dfw airport and when i looked to the east i could see two large vapor trails very wide apart from each other and almost simultaneously we heard a large boom and then that was followed by a second boom and i told my wife i said she said that sounds like an explosion and i said well it sounds like a sonic boom to me and i didn't think much about the uh the double vapor trails but uh uh when of course when i got to the side uh and we we came back in the house they were showing the uh the uh vapor trail across the top of the sky on the news and saying that people had heard about an explosion but said it was a sonic boom now i know having seen the the results that that was probably particles of of the space shuttle separated from each other i understand but it was it was pretty graphic the explosion was i'm not sure where that occurred because of the time that elapses you know when something's traveling that fast but uh i would say this was about uh five minutes after eight central time right because it was it seemed to be a couple of minutes after the 803 that they announced on tv and five minutes after eight would have been approx approximately 16 minutes before the scheduled landing mr knight let me ask you is i i take it that you and your wife your neighbors do this all the time you go outside and watch the shuttle as it goes overhead in route to landing we we do and you know when we hear when we hear

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and you know when we hear when we hear of something the shuttle coming over that's that's about as close as my wife never get to a space shuttle is to be able to walk outside and watch it because a lot of the uh a lot of the descents uh with the with the landing in florida uh they do come over our area so i understand and as someone who does this who who enjoys watching the the shuttle go overhead in route to landing what was going through your mind when you looked up in the air today and saw what you saw well uh bear in mind that uh i followed the golf business in my life and that's what i've done all my life and having watched aircraft

fly over our home landing at dfw airport that's usually a single vapor trail unless it's extremely high in the air and what what what caught my attention was is the vapor trails were very definitely wide and separated very massive a lot a lot extremely larger than just like a regular jet that would fly over and there were two of them and one was the one on the left side was considerably larger than the one on the right now that was just kind of instantaneous on my part i had earlier in my life i'd worked at it general dynamics which is now lockheed here in fort worth and watched a lot of jets fly and so when i looked up and saw that i thought well you know that's kind of strange but it's the space shuttle and perhaps that if that's the space shuttle perhaps that's the way it's supposed to be so um i understand for those folks that i want to say for those folks know i'm just joining us you're looking at video here which was now shot over in north texas there's something falling out of the sky there has been no official confirmation as to what that was at this point sam knight in fort worth texas hey we appreciate you joining us this morning thank you for your insight yes sir and i'm sorry for the tragedy thank you very much sir again nothing official just yet

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official just yet but as bill harwood and others have told us it does not look good president bush has some he's been informed of the situation this wire copy uh president bush has been informed about space shuttle columbia is awaiting more information now from nasa and officials say there is no information that terrorism is involved and i'm sure that's going to be you know the first question on the minds of people ever since september 11th and the fact that there was an israeli astronaut on board the space shuttle colombia this time security was beefed up for that security was beefed up for this 16-day mission although we asked that question to bill harwood a little bit earlier in our coverage here and he seemed to speculate that the shuttle would be at 200 000 feet at this point when it may have broken up and that the idea of somebody being able to have an act of terrorism at that level would not have been a possibility bill hartwood is our heart hartman right harmony is there a man at the uh hardwood i'm sorry is it harwood i apologize bill is our man at the kennedy space center bill you still there i sure am russ bill what's the latest from your end well i'm just reconfirming mission control says the shuttle was at an altitude of 200 000 feet roughly when they lost communications with it uh you can certainly see a shuttle at that altitude you can see it when it's in orbit when the lighting is right as a matter of fact a lot of us go out and watch it fly over quite frequently and during entry when it has a hot contrail behind it that plasma trail as it comes through the atmosphere it's very visible at that altitude we don't know that that's where it broke up it could have been lower than that that's simply where the communications were lost from it the contingency procedures are still in effect and obviously they're still warning people to stay away from any debris at this point there's no way to know where debris would have actually fallen given the altitude and how fast it was going at that moment there as we heard earlier the folks at nasa have alerted emergency crews in the dallas fort worth area to be aware of any debris there specifically what in short of finding any debris what is nasa waiting on before making some sort of official announcement here well i think you know like anything you'd like to be able to know where it came down before you declared

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where it came down before you declared something even though nobody thinks the shuttle survived uh and and i don't see how a crew could have gotten out of a breakup at that altitude they have pressure suits on but those are sr-71 spy plane type pressure suits they're only good from you know under 100 000 feet at that altitude i don't think they would save anyone even if you could get out and certainly at that speed they're not designed to exit a spacecraft going at mach 12 which is what i believe they said 12 times the speed of sound or 12 000 miles an hour i believe they said so i don't think they could have gotten out i think nasa just wants to make absolutely sure where it came down but they've declared a contingency which means that there has been an emergency and that's in a shuttle with a glider we're now 58 minutes past when it would have landed it's definitely on the ground somewhere we talked about this earlier bill that we're coming up now on one hour after the scheduled landing of the space shuttle columbia take us behind the scenes what's going on down there at mission control it's really two things russ on the one hand these men and women in mission control are extremely trained they're going through procedures that have all been thought out in advance

what you do to protect data you want to make sure you save all the data on hard drive so you can go back later and analyze it to find out what might have led to this failure and exactly what happened at the same time though there's a real human drama going on too because these flight controllers train with these astronauts on a daily basis before flights they're good friends and all of them know in the back of their minds that those friends have probably been lost i think it's a it's a terrible climate to work here tonight it must be a crushing moment in mission control right now [Music] it is now 10 15 25 10 15 25 seconds here on the east coast we are coming up on 10 16 which would officially mark the one hour mark that the space shuttle columbia was scheduled to land in florida at this time we want to update you as to what's going on breaking story from nasa's mission control in houston nasa has declared an emergency after losing communication with the space shuttle columbia just minutes 16 minutes in fact before it was to land the shuttle was to

[00:36:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=2160s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=2160s)

before it was to land the shuttle was to land at 9 16 as i just told you eastern time at the kennedy space center in florida and officials lost contact with the shuttle around nine o'clock as it passed over texas once again you're looking at video here shot in north texas of something coming out of the sky no official word as to what it is just yet nasa ordered flight controllers to retain all their records the shuttle had seven astronauts on board for a two-week science mission including six americans and one israeli the wives husbands and children of the astronauts who had been waiting at the landing strip in florida have been gathered by nasa and they've been taken to a separate place and once more i want to tell you there's still no official word as to what has happened official being the big strong word there but nasa has put out a public advisory to avoid any debris that may have come from the space shuttle search and rescue teams have been dispatched in the dallas fort worth area the orbiter was an altitude altitude rather of 200 thousand 700 feet traveling at about 12 500 miles per hour when contact was lost question carlson you hear you've got another eyewitness i do stuart fleming lives in corsicana texas stuart are you on the phone with us um yes i am i can barely hear you you can barely hear me well i will try and speak up as much as i possibly can if you can tell us this morning did you go out to specifically watch the shuttle coming in um no i was just inside making breakfast and i heard like the sonic bang it's a noise i've never heard before and i just went outside to see what it was and there was like a big plume of light smoke like a trailing plume of white smoke about just a hundred meters from my head or maybe maybe a bit further but it's it was quite close you know what i mean and then about 15 minutes later on the news they said the shuttle went missing so you know two and two together equals four right so so stuart you were not specifically up around eight a.m central time in texas this morning to go outside and watch the shuttle before its re-entry shuttle was actually

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shuttle was actually coming back today i was just you know so so you would have no idea that this was actually the shuttle what was going through your mind after you heard that noise and then you proceeded to go outside i heard the noise and i said to my partner said what was that noise it sounded like it sounded like something just killed everything it was such a bizarre noise you know what i mean it was a noise i'd never heard before and when i went outside i could see the white smoke and i'm like well it looks like the smoke from one of those aeroplanes that you know had smoke and they write letters with it right and it was just this trail of white smoke and it was just but you could see where the white smoke started and where it ended it didn't come all the way from up in the sky it only started pathway in the sky and then it went to the ground we're looking at we're looking at pictures of that right now stuart oh okay and it was just i don't know i know i said can you go outside and look i said look at that that is just too strange and so you went and had a walk and i don't know and then 16 minutes later on the news it was on the news and i'm like that's it you put two you put two and two together that that's in fact what had most likely transpired outside of your home this morning i think so you know what i mean i just it's so bizarre because i don't know have you ever seen the shuttle come in then for re-entry on a normal flight pattern no i'm from australia we don't have spaceship right so this would be the first time for you we're we're sorry that this is the first experience that you may have had we appreciate your insights this morning stuart fleming in corsicana texas i'm actually from australia russ

okay thank you very much thank you gretchen as we've told you elon ramon a colonel in israelis air force and a former fighter pilot uh is on board this shuttle and there were concerns for his security because it was the first time that an israeli citizen had been aboard a shuttle and there were some concerns

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a shuttle and there were some concerns by nasa in fact security was beefed up right now we want to go to cbs news correspondent david hawkins who is in tel aviv david what are you hearing from your end well russ the israeli television was covering the landing live and israelis are as shocked as mystified about what happened as as anyone else and are awaiting the information about the circumstances of this tragedy uh just like everyone else is in the united states and around the world as you said colonel ilan ramon a 48 year old israeli fighter pilot was on board and uh so all of israel is is waiting to hear about uh what happened it was he's the first israeli astronaut to go into space and one of the few bright spots uh that uh that this country's experienced in the last few years was when he was launched into space uh just over two weeks ago russ can you tell us anything else about colonel ramon i know his first as you said his first mission in space what else do we know about him well he's the uh he's the son and the and the grandson of a holocaust holocaust survivors his mother and grandmother were both holocaust survivors and his father fought in the in israel's war of independence uh colonel ramon himself fought in two of israel's wars the yom kippur war in 1973 and the lebanon war in 1982. russ david hawkins in tel aviv thank you very much we'll continue to uh to come back to you throughout the course of the morning as more information becomes available on your end bill harwood is standing by at the kennedy space center in florida bill i'm i'm pause for a moment because i thought i heard someone from mission control talking are you hearing anything else officials no not not at all that's james hartfield in mission control still warning people to stay away from debris if they find any there are toxic fuels that could have survived in small tanks and they want to make sure that nobody gets hurt but otherwise there's no word yet on where any debris might have landed and no official word on the fate of the seven astronauts

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fate of the seven astronauts we just heard from david hawkins in tel aviv about the israeli colonel on board i know we've gone through this several times throughout the course of the morning bill but because people are tuning in every few minutes why don't you tell me again about the other six on board six americans correct uh that's correct uh the commander was rick husband he is an air force colonel making his second flight in his first as a as a commander the pilot was william willie mccoool a navy commander making his first flight the flight engineer sitting directly behind him between the commander and pilot was kalpana chavla a phd scientist on board as a flight engineer and a researcher to her right directly behind the pilot willie mccoool was laura clark a submarine a navy submarine officer and physician who was making her first flight down on the lower deck where the remaining three members of this crew as you mentioned elon ramon the israeli astronaut was on the lower deck strapped in so were michael anderson the payload commander of this flight the one in charge of all the research and another physician david brown making his first flight mike anderson was making his second so split up on two levels on the shuttle flight deck as always and no sign as we've said before russ no sign of anything out of the ordinary up until 9 a.m eastern time when contact with the spacecraft was lost especially carlson has a question for you bill gresham yeah bill i was just wondering if you could go through for us again what the options may have been as far as what may have happened here i know that you were talking earlier about when the columbia actually went up into the air 16 days ago that there was a piece of insulating foam on the external fuel tank that came off during liftoff and this was of concern however engineers studied this and decided that it wasn't going to be a problem upon re-entry if you could go over that again and maybe some other scenarios about what possibly could have happened sure you know when the shuttle takes off gretchen it weighs four and a half million pounds loaded with fuel and of course it has a tremendous amount of thrust there's a lot of vibration uh when this shuttle took off columbia you know it's attached to an external fuel tank that rises up above some of the orange foam insulation on that tank apparently broke off and hit the left wing of the orbiter in

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and hit the left wing of the orbiter in the edge of its leading edge they call it that's the gray colored area here this is a special material that's designed to withstand high heat because during re-entry the leading edges of both wings and the nose of the orbiter where the heat load on the shuttle is maximum so that's obviously a critical area if there was any significant damage on the leading edge when you got back down in the fireball of re-entry that could degrade the wing further and cause structural failure but i gotta stress leroy kane the flight director for this mission said yesterday during this normal pre-entry news conference that they had studied this in great detail were absolutely convinced based on the the nature of that foam it's very lightweight stuff that nothing of any significance got damaged they didn't alter the trajectory today at all because of it and he said yesterday they didn't expect any problems at all now as you know gretchen when the shuttle lands it's a glider there are no rocket engines firing except at high altitude there are some small thrusters that fire to change the orientation until it gets deep enough into the atmosphere to control the flight are you still with me uh gretchen yes i am i'm sorry i was hearing uh some talk in my ears um other things to think about during entry besides the sheer heat load on the orbiter uh one thing that is moving in the spacecraft even though it's a glider or three auxiliary power units they're called apu's uh they're located at the top part forward part of the engine compartment of the shuttle the hydraulic power units are what generate the hydraulic power needed to move the shuttle's wing flaps uh to do the landing gear brakes for steering and all of that those machines generate tremendous horsepower they spin at very high rates and an apu failure is something some of us in the space business always keep in the back of our minds for launches as well as rocket engine failures you know thermal protection system failures and that sort of thing there's nothing on board this orbiter that would have just spontaneously blown up or anything like that you know it does carry a very flammable explosive fuel that's what it uses in orbit to maneuver and some of that fuel is being used during the descent but whether or not an engine could have malfunctioned during a normal maneuvering

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maneuvering burn unknown rather the leading edge of the left wing was an issue is unknown the health of the hydraulic power units at this point to us anyway is unknown mission control could very well have telemetry on some of these systems we're talking about gretchen that would either exonerate them or point a finger or blame but we haven't heard about that yet so i'm just looking at things that could in theory have gone wrong we don't have any data that would give us any idea of what actually might have gone wrong of course well we appreciate your insights bill i'm going to turn it back over to russ mitchell now okay thank you very much bill harwood again stay there we're going to talk to you in just a bit i want to tell you it's the latest we have from the white house there is this is a quote here from gordon giandrea he is the spokesperson for the homeland security department he says there is no information at this time this was a terrorist incident obviously the investigation is just beginning but that is information that is the information we have right now it is uh 10 26 here in the east coast and i'm joined by cbs news correspondent dan rather dan good morning to you good morning russ on a very solemn morning yes as always i think it's important to emphasize what we know and what we don't know we don't know in fact that the apollo the shuttle has exploded we don't know for a fact that there are no survivors but it certainly looks that way and certainly does bill harwood there at the kennedy space center we were talking earlier bill and you just told gretchen the various scenarios that could have took place here let's talk about that escape hatch for lack of a better term that could possibly have been used in a situation like this well russ you know after the challenger accident uh one of the things that they looked at very seriously was how to put an escape system on the on the shuttle they even talked about ejection seats that would fire out the top as well as the bottom because remember they sit on two decks so that's that's not an easy thing to build they talked about all sorts of systems what they ended up doing uh was putting an explosive hatch on the side of the orbit the same hatch they entered the vehicle with uh and in flight the idea was you can blow this hatch off

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blow this hatch off a telescoping rod extends out into the airflow the astronaut hooks his chute onto it slides down the rod and bails out uh but that can only be used when the spacecraft is in a level descending flight under control if the shuttle is out of its normal orientation it's doubtful it could be used and certainly it can't be used above a hundred thousand feet the astronauts are wearing pressure suits that are very similar to the ones the pilots of sr-71 blackbird spy planes use rush you might have seen those you know they carry the air conditioner with them those bulky suits they weigh about 70 pounds they're only good up to 70 000 feet or so and i and i don't remember the exact upper limit but i know it's not above a hundred thousand uh so i don't if this really did break up or have a problem in an altitude of two hundred thousand feet i don't think bailout was an option for them billy dan rather uh at this time of morning on a saturday we have a lot of people tuning in have not been with us soon earlier let's go over right from from the start of sort of points one through five right of what we actually know has happened what we know dan was at 8 15 this morning commander rick husband and willie mccoool fired the shuttle's twin orbital maneuvering braking rockets back here in the back of the orbiter they're flying upside down they fired those rockets for about two and a half minutes and the effect of that was to drop the other side of the orbit down into the atmosphere that's how they get home the shuttle then flipped over it entered the atmosphere normally at an angle of about 40 degrees that's standard it came down it crossed the coast of california about five minutes before six or something like that pacific time and then crossed across arizona new mexico and on out over northern texas descending all the time we know it got that far they had telemetry from the shuttle there was some voice contact right around 9am i remember marking it because it was a little bit unusual the commander or the pilot i'm not sure which there was there was a communications about tire pressure indications you know the shuttle band as you know has telemetry sensors all over it and somebody saw some data that indicated a change in shuttle tire pressure

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pressure that was the last uh a bit of communication at 9 00 am the the astronaut in mission control charlie hobau who talks to the crew known as the capcom then began repeatedly trying to raise them over both the primary circuits as well as their uhf radio circuits backup channels with no joy at all and i'm stopping here to see what james hartsfield is saying in mission control communication with the space shuttle columbia this morning at approximately 8 am central time as colombia was descending toward a landing in florida at the time columbia was at an altitude of approximately 200 thousand feet above north central texas no communications or tracking from colombia has been received by mission control since that time certain authorities in the dallas fort worth area and in portions of east texas and other pertinent areas have been alerted to the space shuttle contingency any debris that is found that may be related to the space shuttle's contingency should be avoided and may be hazardous due to the toxic nature of propellants that are used on board the space shuttle the locations of any possible debris should report be reported immediately to local law enforcement authorities dan i was saying up until 9 a.m absolutely no problems of any kind have been noted except for that tire reading message and as you know dan sometimes during entry when the heat builds up around the spacecraft communications are intermittent anyway that's not so unusual but when they couldn't re-establish contact in the minutes ahead that did begin to cause some concern as a glider of course the trajectory is designed to bring the shuttle back to the kennedy space center runway it cannot fly anywhere else it doesn't have the lift of a bigger airplane it it really flies a little bit like a brick it's all under computer control at this point and as the minutes went by it became clear something had happened uh dan you're correct we don't know what yet but we know it can't stay in the air it definitely came down uh it's definitely back on the ground

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uh it's definitely back on the ground somewhere but we don't know the details of what might have transpired bill you said there was no indication of any difficulty and i know the context in which you said that let's go back to some previous shuttle mission took in the shuttle discovery and they did some examinations let's bring our viewers up to date on that yeah that's right dan these are these are problems that they had encountered both last year and then again this year uh problems with some ball bearings actually big plum

sized bearings in the shuttles fuel lines that's not an issue on re-entry of course because they were in the main propulsion system where the three main engines are and those don't operate during entry so that was an inert system and i don't think anybody at this point anyway is thinking about that um of course there are any number of things that could have happened at altitude i mean things i would wonder about as i've been mentioning earlier was some potential damage to the leading edge of the left wing of the orbiter during launch when some foam insulation came off the external tank and can be seen on video impacting that wing they said they yesterday that they didn't believe that was any problem at all they didn't change anything about today's entry they weren't at all concerned up until the moment they lost communications there was no telemetry from the orbiter that indicated anything out of the ordinary at least that we're aware of uh so much telemetry comes into mission control there could be somebody down there by now who has some hint of what happened but we haven't been told that and bill what about um there were some words after this shuttle mission had been launched about when the fuel tanks went apart from the shuttle some little piece of something got loose let's review that right that that's what i was mentioning during the launch sequence when some foam insulation came off and hit the leading edge of the wing i don't believe the shuttle had even gone through the sound barrier at that point it was right over the pad fairly early in launch they could see it hit the wing but because that material is very lightweight they didn't think that it would have caused any significant damage at all of course if they're wrong and there was

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of course if they're wrong and there was significant damage there the heat loads this experiences and i'm using engineering speak it just means they get very high temperatures on the leading edge of the wing during re-entry because of atmospheric friction if there was a a weak spot on the wing that could certainly lead to a problem we have no indication that happened however and yesterday the flight director lero y keane stressed that they didn't think there was any issue at all with the wing well i want you to really back at the starting point sorry bill i do and i know you want to underline italicize and put in large caps nobody knows what has happened to the shuttle what we've been trying to do here is just go over a few things that you know looking back on you say well could that have been an indicator could this have been an indicator but nobody knows what's happening to this absolutely true the only the only thing we know dan is that the shuttle isn't still in the air that's the only thing we know uh the shuttle is a glider can't stay in the air more than a few minutes past its targeted landing time and that was 9 16 a.m eastern time so we know that we don't know anything else at this point conclusively bill i also know that you've gone over this earlier but again i'm keeping in mind how many people are joining us in progress right now the possibility of any of the astronauts getting out of the shuttle as it descended you said we don't know much but we know that it's down any at all chance that any of the astronauts or all of them could have escaped this is mission let me let me listen to mr hartsfield for just a moment to proceed through contingency plans designed to secure all information and data pertinent to today's descent by the space shuttle columbia communications with the space shuttle columbia were lost at approximately 8 a.m central time this morning what they've been saying to answer your question if the shuttle broke apart or suffered a catastrophic failure at an altitude of 200 000 feet which is when they lost communications the bailout system they have for getting away would not have saved their lives if if however they lost communications for some other reason and the shuttle was

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some other reason and the shuttle was able to continue descending to a lower altitude before a catastrophic failure occurs then that is within the realm of possibility but at two hundred thousand feet the system they have would not have saved them harwood our veteran cbs news expert on the space program reporting from florida russ mitchell there are some eyewitnesses who are beginning to speak up and speak out now we have spoken with a few this morning want to go back to one we talked to about 30 minutes ago rob perillo is in lafayette louisiana miss pillow you there yes i am russ good morning to you sir tell us once again what you heard what you saw this morning right well uh just a little background information i'm a local meteorologist at klfy and uh we usually play up if the shuttle is going to be coming in overhead during the course of its uh missions that are not uh space station specific and we were looking off into the west northwestern sky pretty

much anticipating where it was going to come in and usually it comes across here about 12 or 14 minutes before it makes a landing over the kennedy space center and uh it we picked it up i got it on my video camera and by the time i had it focused on my video camera i started to see multiple uh multiple plumes kind of like the video that we're seeing right now uh as i watched it it uh really then took a hard left from the where we're seeing this angles out of dallas it took a left uh like debris had actually certainly obliterated and then uh whatever debris was left uh it for some reason it went off to the left i don't know why did that uh atmospheric conditions indicate that uh there's a little bit of a of a westerly wind uh perhaps a west southwest wind aloft and interestingly enough uh i just uh checked some of the national weather service radars uh out of dallas lake charles fort polk they're all picking up a plume that extends from just south of dallas into the vicinity crossing toledo bend in texas and somewhere over uh vernon parish and

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somewhere over uh vernon parish and that's in western louisiana roughly lafayette's about 100 miles from the texas border mr murillo it's dan rather with russ mitchell you said that you were taking some video of this some home video yeah my home video is a little bit cruder but it's certainly picked up pretty much at this point and uh at that point uh once again you know your emotion is like you can't believe what you're actually seeing and uh unfortunately i i kind of knew what was happening at that time i went to the nasa website and it was quiet there for about a minute and uh uh pretty much knew what had happened well we we of course would like to see that video and uh if i may i'll have someone be in touch with you about that we'll upload it to you well i appreciate that very much we'll let somebody do it but i want if you can stay with us just a moment more i want to take you back to the first seconds when the shuttle came into view take me from the very first moment you saw it to the moment you thought something was wrong and tell me what you saw sure dan uh basically uh from laughing yet but believe it or not we can see the shuttle when it's uh somewhere around the dallas vicinity and uh at that point uh my wife and daughter had spotted it as i was getting my camera set up and it was a singular ball what we're seeing right now normally that's what we see we see a streaking plasma uh streak across the sky here in southern louisiana i wasn't sure if we're actually going to be able to see it an hour after sunrise so sure enough we did see it and at this point when i saw multiple things breaking off and then i completely lost it on the camera i took my eye off the camera and there was nothing left but a smoke plume so uh obviously it fell off uh our uh not not only our viewing screen but uh off our visual uh screen as well couldn't see it on binoculars either following that normally when we see the space shuttle come on and we'll hear the sonic boom

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sonic boom a few minutes later and it's usually a singular sonic boom and nothing overly too loud uh this time it seemed to be a much longer protracted sonic boom uh with multiple uh multiple announcements uh going maybe seven or eight times indicating maybe uh multiple uh pieces of debris coming into the atmosphere sent by the spacecraft for one second we're gonna listen to mission control in central time as it flew at an altitude of 200 000 feet okay this is a speed of approximately twelve thousand five mr let me ask you i i believe when we spoke with you earlier you told us you were an amateur astronomer picking up on on dan's question at what point did you realize that something was wrong uh immediately russ immediately uh when you see that come in and you see more than one smoke plume uh you know there's more than one thing coming in burning into the atmosphere and uh unfortunately uh just like everybody else it's kind of uh and i remember the challenger accident uh same type of feeling only uh uh knowing with my background and and knowing what i know i was pretty sure of what had occurred and that's when i raced back into my house to check he uh checked the nasa website and uh there was dead silence there for the for the next minute mr rodrillo in lafayette louisiana we thank you very much thank you we're going to check in very quickly now with mark noller who's at the white house to tell us who knows what there and what they know mark good morning dan president bush is at camp david this morning he went there last evening after his meetings with prime minister tony blair we're told that the president has been briefed on the space shuttle situation he was briefed by chief of staff andrew card we're told there are indications that the president will be returning to the

white house to more closely monitor the shuttle situation and respond to to offense it hasn't been officially announced yet although maintenance workers at the white house have been given the indication that the president

[01:02:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=3720s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=3720s)

given the indication that the president would be returning within the next couple of hours in addition a spokesman for the department of homeland security gordon jondro says that there is no indication at this time that any foul play or terrorism was involved in the shuttle situation and that also has been passed on to the president at camp david where he is monitoring the situation mark nola reporting from the white house we go to bill harwood at in florida bill if you're there bring us up to date we're trying to every five minutes or so at least bring people up to date on the very latest i don't think there's been any major developments now for maybe a half hour or 45 minutes but let's take it right from the top nasa's declared an emergency and fears the worst about the shuttle this morning that's right dan they do leroy kane the entry flight director declared contingency procedures in effect it's kind of a haunting phrase because the flight director jay green back on january 28 1986 said the same thing when contact was lost with the shuttle challenger which as you know broke up about 73 seconds after liftoff in nasa's first in-flight uh tragedy uh in this case it sounded much the same the commands are all routine they've told the flight directors and controllers to preserve their data from all the telemetry that came down from the shuttle prior to the moment when contact was lost in hopes that after the fact they could go back through that data stream and figure out what might have happened so that's what's going on they have not declared the shuttle loss they have not addressed the fate of the crew i think as as was the case with challenger 17 years ago they waited in that case until they had positive indication of where the shuttle had gone offshore and ended up and i think that possibly is what's going on here but there have been no more changes they just simply advising people if they find debris to stay away from it the shuttle carries hypergolic rocket fuels hypergolic meaning they ignite on contact they're very dangerous and if any of those tanks survived whatever might have happened they're just telling people to stay away from it and be careful but other than that dan no change at this point

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no change at this point bill you've said it before but let's repeat it we don't know a lot but we know that the shuttle is down somewhere we know these things we know the shuttle is down then it makes the return to earth as a glider unlike the lightweight glider as you can see at an area airport it doesn't have the big wings and the lift that lets it loiter as they say or lets it fly around to make another attempt at landing it has to make it on the first attempt that's the nature of the beast and of course when the landing time rolled around 9 16 a.m within a few minutes of that there was no question that the shuttle is down somewhere but we have no idea where all we know is the contact was lost around 9 a.m there is video of material streaking through the air that looks very reminiscent of the mirror space station that has very reminiscent of what happened to the mir space station if you remember when it re-entered the atmosphere in a controlled entry a few years ago it looks very much like that but it's unconfirmed at this point uh exactly what we're seeing there bill harwood in florida i'm going to bring you now john ira petty who's a spokesperson for nasa mr petty are you there yes i am thank you uh tell us what you can tell us about the situation at this moment please well as i'm sure you know we lost contact with colombia at about uh 8 am central time at that time the spacecraft was on its uh re-entry path that would have taken it to the kennedy space center for landing about 16 minutes after that at 8 16 a.m central time we've heard nothing from colombia since and at this moment nasa's position is it does not know what has happened to the shuttle yeah obviously uh you know we've declared a contingency the spacecraft is uh basically a glider when it comes back uh through the atmosphere it's it's clear that the spacecraft is down someplace it's we're seeing uh news reports uh that show footage of what appears to be a breakup uh of a vehicle over

[01:06:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=3960s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=3960s)

uh of a vehicle over the approximate path of where colombia would have been uh so we're greatly concerned you say no doubt that it's down i i yes i i think that's an accurate statement but the fate of the astronauts at this moment officially unknown that's true we thank you very much for being with us thank you russ let's go over the names of the astronauts who were aboard this mission emphasizing as the nasa spokesperson just did we do not know what happened to them but uh it's fair to say at the very least we fear the worst that is true six americans on board one israeli citizen first up the mission commander rick husband test and military pilot this was his second mission 45 years old from amarillo texas mission pilot lieutenant colonel william mccool testing military pilot his first mission 41 years old from san diego california commander laurel clark mission specialist a doctor on board their first mission 46 years old from racine wisconsin i'm going to try this kalpana chawla kalpana chawla mission specialist aerospace engineer first mission 41 years old uh born in india but a u.s citizen michael anderson lieutenant colonel michael anderson mission pilot test and military pilot this was his second mission 42 years old from spokane washington a colonel from the israeli air force mission specialist tested military pilot first mission 48 years old his home tel aviv israel and dennis we've been pointing out because of his presence on this flight security was beefed up not that that has anything to do with anything nothing official as well pointed out this morning has been

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well pointed out this morning has been said security was beefed up on this particular mission because this israeli citizen was on board columbia's 16-day mission was to conduct scientific research in the fields of space life and physical sciences this was nasa's first shuttle mission in three years that is not involved the international space station per se or the hubble space telescope in 42 years of u.s human space flight that goes all the way back to the beginning of the u.s human in space program there has never been an accident during the descent to earth or landing on january 28 1986 as all of us alive and memory age at the time recall space shuttle challenger challenger exploded shortly after liftoff but since that time been a lot of investigating of that accident a lot of retooling and starting ground zero testing of the shuttles and nothing untoward rush had happened since that time since this morning and while there has been some speculation including some of our own about what might have could have gone wrong actually we haven't gone that far we just pointed out a couple of things along the way a crack in shuttle discovery just that they found right they investigated all the other shuttles uh then there was this very small piece of insulation uh that they worried about that it got loose when the fuel tanks cut loose on this shuttle mission but nobody knows uh what has happened exactly nothing official and despite that problem on takeoff the mission was considered a success apparently there were no problems on board the mission in regards to that we want to point out very quickly it is down 10 49 here in the east one hour and i guess 33 minutes ago the shuttle was scheduled to land and nasa lost control around nine o'clock eastern time and about five minutes after that you heard the concern from the voices of mission control that something was definitely

[01:10:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4200s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4200s)

control that something was definitely wrong and here we are almost two hours after contact was was last made and we still don't have anything official let's go to bill harwood back at in florida bill if you were there i'm here there uh what have you heard in the last few minutes nothing at all near dan they're they're just simply i think waiting to get some confirmation of where the spacecraft or the or the debris from the spacecraft uh might have landed i'm sure they're checking with military radar institute installations across the southern tier of the u.s this is james hart's field again in mission control contingency procedures designed to secure all information notes and data pertinent to today's dissent by the space shuttle columbia communications were lost with the space shuttle columbia at approximately 8 a.m central time as columbia was above north-central texas at an altitude of 200 thousand feet traveling approximately 12 500 miles per hour search and rescue forces in the dallas fort worth area and in other portions along columbia's planned route have been alerted to the space shuttle program contingency any debris that may be found that may be related to the space shuttle contingency should be immediately reported to local authorities and avoided debris may be hazardous due to the toxic nature of propellants used on board the space shuttle they're recapping where they stand right now they don't uh i don't hear anything new here i'm not sure that you're aware of this that uh nasa has now

scheduled a news conference it is expected around and i use the language of the announcement the a nasa news conference is now scheduled of to start expected around 11 30 a.m eastern standard time right and i'm sure they'll give us at least some sense of what they know and dan i just wanted to stress one more time something that you said earlier speculation in a case like this is a is not a productive thing i remember

[01:12:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4320s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4320s)

is not a productive thing i remember when challenger happened and i've been struck by this over the years when you're talking about a spacecraft as large as this as far away as it was when this happened traveling as fast as it was traveling it's very difficult to know exactly what happened even though you're watching it on television or seeing videotape you know people remember challenger is an explosion but the challenger itself never exploded and didn't suffer even any fire damage you know it was aerodynamic stresses that broke up the challenger and it's it's very important to keep focused on it's hard to tell from looking at that strip of videotape what might have happened today the challenge of disaster january 28 1986 the challenger that's what you're looking at here his videotape of the challenger disaster right uh it was originally scheduled to launch on january 22nd 1986 there's been some delays cold weather among other things it launched on january 28 1986 and just shortly after the launch it became a ball of flame blast off at that time was at 11 38 eastern standard time it was the 25th shuttle launch it exploded when a faulty o-ring seal failed an o-ring seal failed 73 seconds after liftoff seven crew members total died in the challenger disaster and if i could just if i could enter for just a second they've launched 88 flights this was the the 88th flight since uh the challenger disaster all of them as you know successful and i was struck earlier today dan barbara morgan who was christa McAuliffe's backup and as you remember kristen McAuliffe the school teacher was on board the challenger in 1986 barbara morgan her backup was here at the space center she is now an astronaut she was here today uh flying approaches with the chief astronaut in a training jet to fly approaches before the shuttle got here she was going to fly on columbia in november of this year to become the first educator astronaut in space to fulfill krista McAuliffe's legacy she was here to see her shuttle obviously and her friends who were on board this spacecraft and once again she was here today when when what may have well been a tragedy took place

[01:14:03 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4443s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4443s)

bill harwood thanks bill we have we think somebody on the phone now uh who believes uh that he may have some may underscore the word have some debris from the shuttle in his backyard let's try to bring him up now sir are you on the phone with us yes i'm here mr rather uh dan please if you would tell us who you are where you are and what you see uh my name is mike i'm in eules texas and a little over an hour ago i heard a loud loud explosion and a big piece of what appeared to be metal landed on on my property and um it's lying there now and there's a lot of people here obviously and looking at it and um they believe that it's one of baba bowie's teeth hold on just one one moment like if you will mike a lot of people don't know where eulif texas is uh from dallas you are in what direction and where you're a real idiot you know yeah this is this is a you know unfortunately in these breaking news situations you have goofballs like him calling up uh that was a crank call unfortunately it's a crank call and uh it is true i'm an idiot but that's beside the point uh there's some times when our system of keeping these crank callers off of the phone works and sometimes it doesn't this morning it didn't work we apologize to you for that that was a mistake on our part abject apology for it and we move on there are some eyewitnesses who obviously are not cranks residents of north texas a number of residents throughout the northern part of the state said they saw flames and heard a window rattling boom saturday about the time the space shuttle columbia apparently disintegrated on its way to a scheduled landing at cape canaveral john farolito of carrollton just north of dallas said and i quote it was like a car hitting the house or an explosion it shook that much nasa declared an emergency after losing

[01:16:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4560s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4560s)

emergency after losing communication with colombia they did that as the ship soared across texas at an altitude of about hundred thousand feet while traveling at six times the speed of sound and then it disappeared the space agency said search and rescue teams in the dallas fort worth area were alerted now the the phrase search and rescue teams would indicate that nasa at that point is still holding out some no matter how one hoped that somebody might be found alive off of the shuttle at some point that will become a search and recovery effort once nasa determines in its own mind and publicly acknowledges that there are no survivors they have not yet done that helen watts with the dallas fire department said search and rescue teams were on standby but had not been dispatched to any locations we have some reason to believe that that's changed as of now now gary hunzinger in plano said he saw the shuttle flying overhead and i quote i could see two bright objects flying off each side of it i just assumed that they were chase jets there were no chase jets in the area of course and fiorillito told the associated press and i continue to quote him directly i was getting ready to go out i heard a big bang and the windows shook in the house now bulletin from north texas nasa now says shuttle debris cited in north central texas no further details repeating this bulletin nasa's now says officially that shuttle debris has been cited in north central texas doesn't say where or under what uh circumstances go back to bill harwood in florida bill dan i just wanted to say and i we can't move our camera in here but the security teams here at the kennedy space center have just lowered the flag to half staff here at the press site which is obviously a an indication and it's a poignant scene i must say as we look at the pictures of the crew of the shuttle we go to mark nola at the white house mark dan we got word a little while ago that

[01:18:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4682s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4682s)

dan we got word a little while ago that president bush has now left camp david to return to the white house uh the president is motorcading back to the white house from camp david because of the weather low cloud cover marine one was unable to be used to return the president so instead of a 20-minute helicopter ride it'll take about 90 minutes for mr bush to return to the white house it is certainly an indication that while nasa has not announced what happened to colombia that the white house fears the worst the president would be able to uh more closely monitor developments in the shuttle situation from the white house and respond to it we certainly would expect him to make a statement of some kind shortly after his return to the white house in about an hour or so mark nola at the white house repeating that nasa has tentatively scheduled a news conference for about 11 30 eastern time that would of course be 10 30 in the central time zone and we should have a summation of what's known and not known from an official standpoint at that time russ it is now 11 o'clock here on the east coast as you said dan every few minutes because folks are getting up on saturday morning and tuning in we want to remind people why we are here this morning you are watching the cbs news special report there is still no official word from nasa but it would appear the space shuttle columbia has been lost nasa now is saying that shuttle debris has been sighted in north central texas mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida the shuttle was over texas at the time nasa has declared an emergency and scrambled rescue teams from the dallas-fort worth area president bush who was at camp david in maryland is on his way back to the white house and is receiving updates nasa has put out a public advisory to people in texas to avoid any possible hazardous debris that may have come from the space shuttle bill harwood at the kennedy space center let me ask you very quickly you mentioned down there that the flags have been lowered to half

[01:20:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4801s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4801s)

that the flags have been lowered to half staff at what point short of finding any debris would nasa come out and make an official announcement as to what's going on uh i would say i would guess uh russ and i'm hearing people talking i'm having a little trouble hearing you but i would guess at this news conference they'll tell us what they know in the case of the challenger accident it was several hours after the fact before they came out and said the crew was feared lost i see we talked about this earlier bill the families of the astronauts had gathered there at the kennedy space center i understand that there was a luncheon scheduled for the astronauts and their families upon the safe return of the shuttle from what you know where

are the families now usually the families are at the runway by that point in the in the descent there's a special spot for reporters vips and family members to watch the shuttle land i assume i don't know i assume they were at the runway whichever family members were here the plan was for the astronauts to get off the shuttle go back to crew quarters for medical checks and exams as follow-ups to some of the research they've been doing and you said lunch and i think it was more casual than that i think once the exams are over they simply enjoyed a light lunch and just reunions with their friends and family nothing all that formal but i believe they were here at the runway when this happened bill dan rather they're bound to be uh a long investigation by nasa it's far too early to even speculate about how far this will set back the space program but i'm keeping in mind there are uh astronauts up at the space station i believe there are three up there at the moment are they none there are dan uh the expedition six this is the sixth full-time crew to be on the station commanded by ken bowersox the former shuttle commander his science officer don pettit and a russian cosmonaut nikolai budaran they're supposed to come home in march aboard the shuttle atlantis which would be the next flight to go obviously with the failure like this they're going to have to get to the bottom of what happened before any mission launches again but for the safety of the station crew keep in mind that the space station has a russian soyuz re-entry vehicle

[01:22:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4921s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=4921s)

has a russian soyuz re-entry vehicle attached to it at all times they can carry all three of them back to earth safely if the shuttle for whatever reason can't get up there in time to bring them down before supplies run out while we've been on the air this morning dan the russians launched or were supposed to have launched an unmanned progress supply ship with fresh food and other consumables to the station i assume that got off okay and as i said eileen collins the first shuttle female commander is due to command the atlantis taking off around march 6th to go to the station bring the old crew home take the new crew up but obviously with something like this that flight will not fly until they get to the bottom of what happened today phil is any indication that the astronauts aboard the space station know what happened this morning i'm sure they do by now dan they they live according to gmt you know the kind of time they have in london they're about five hours ahead of us it's late afternoon to them but i'm sure mission control has told them the space station mission control center is literally just down the hall from where the shuttle controllers sit and i'm quite certain they know what's happened at this point well for clarity uh there are three astronauts in the space station they're due to come back by another shuttle flight via another shuttle flight in march correct but if for any reason if for any reason it's determined that the shuttle flight shouldn't go up to get them they could come back with that soyuz emergency vehicle that's attached to the space station absolutely dan and they also have quite a few supplies they always leave the space station with enough supplies on board to last a crew long enough to get past any reasonable shuttle launch delay so i'm sure they're good as they are today well into the spring before you would have to start entertaining the possibility of coming home on a soyuz now of course as you know in the case of challenger there was an issue a long-standing issue with the boosters uh that we weren't aware of at the time that it took a lot of research to get back through it's not clear yet it could well be that whatever happened today it could be something complicated it could be something that will leap out of the telemetry at them and be relatively easy to fix i think the big question is losing an irreplaceable three billion

[01:24:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5041s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5041s)

losing an irreplaceable three billion dollar spacecraft uh there's no production line left for space shuttles it leaves nasa with three orbiters and you have to it then becomes a political question about what the government and what the country wants to do with with the space program now that it's down to three space shuttles bill i i hope that you'll bear with us here that a lot of people might not know what telemetry means you say the information comes out of the telemetry all right let's go through that what do you mean by that the shuttle is wired up with sensors literally all over it from everywhere from tire pressure sensors that just measure how much air is in the landing gear tires to fuel temperature sensors flow rates uh cabin air all of that there's a very heavy stream of this data that gets sent back by the shuttle's flight computers throughout a mission and during decent especially all of those data streams i'm calling them basically coded radio signals

that have data in them about temperatures pressure velocity altitude all of those things about how all of the subsystems in the shuttle are working from second to second some of those systems are sampled meaning they take a little snapshot of the data every few seconds some are happening more than once per second all of that data comes down to the ground they've asked the engineers to lock it all on the hard drives to preserve it because they'll go back through all that data line by line in the days ahead to look for any indication of what might have led to this and i can tell you based on past experience with the shuttle i'm quite certain they'll find something because no accident even though it looks like it happens in the wink of an eye when you have computers checking these things you know many times a second i'm sure they'll see something that'll give them at least a hint of what might have gone wrong but to this point we don't know what that is we'll be back to you shortly let's go to mark nola at the white house mark dan the official word from the white house is that the president left camp david by motorcade just a little bit after 11 a.m eastern time it takes about an hour and 15 minutes for the president to get back to the white house the reason he is motorcade instead of flying by marine one is that the weather is uh

[01:26:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5161s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5161s)

marine one is that the weather is uh inclement it was the reason that the president and british prime minister tony blair were unable to have their media meeting at camp david yesterday as was the plan so the president is motorcading back he had been informed of the shuttle situation earlier in the morning by white house chief of staff andrew card the president had spent the night at camp david as a result of the information that he received he decided it was best for him to return to the white house if anything is an indication that the white house fears the worst about the shuttle columbia it is that the president is returning by coming back to the white house it enables him to better monitor developments in the situation to be briefed on what happened on what it means and also to address the nation on the impact of a shuttle disaster or a apparent shuttle disaster of this nature and that's what we're waiting for he should be back at the white house about 12 15 p.m eastern time a little over an hour and 10 minutes from now mark nola at the white house the next uh scheduled event and i use the word schedule loosely it will be about 11 30 eastern time that would be about 23 minutes from now nasa is scheduling its first official news conference since word that the shuttle went down over north texas the fate of the crew officially unknown but the flag has been lowered to half staff at the kennedy space center in florida that would be an indication a very strong indication of what nasa believes has happened to the crew but i emphasize there's been no official word on the fate of the crew nasa has said number one that the space shuttle is down number two that what's believed to be some debris has been located in north texas site of that and other details unknown but those are two telling facts that we have nasa says the space shuttle is down two it says that some debris what it

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two it says that some debris what it believes some debris has been found and then off to the side if you like the flag has been lowered at half staff in florida now nasa will be holding this news conference at or about 11 30 eastern time 10 30 central time now for those of you who followed the space program the american manned humans in space program since its inception in the early 60s this is the third disaster if you will the first was the what was now called apollo zero you know the apollo program is what took the united states to the moon a training session on the launch pad in january of 1967 scheduled to be the first manned mission on february of 1967 fire swept through the command module and of the crew died in that apollo 0. virgil grissom edward white roger chafee now we also had the apollo 13 accident in space which the well-known movie was made about apollo 13 in the early 1970s in which they had a crisis aboard the spacecraft but in that case april 17th 1970 the crew james lovell john swigert fred haas jr they all got back to earth and then of course we had the disaster of shuttle challenger in the mid 1980s in which the crew was all lost as the shuttle went into a fireball just some 73 seconds after takeoff russ mitchell dan seven astronauts were on board the space shuttle columbia six americans and one israeli citizen elan rahman a colonel in israel's air force and former fighter pilot because of his presence security was beefed up around this flight however there is word from the white house this morning that there is no indication that terrorism has been involved in what may have transpired today i want to go right now to cbs news correspondent

[01:30:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5401s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5401s)

right now to cbs news correspondent david hawkins who is in tel aviv david i know all the the launch was scheduled to be covered by israeli television there what's the latest from your end well uh here in israel there's not much more information than than is coming out of the united states uh two weeks ago a little more than two weeks ago it was practically a national holiday here when alan ramon the 48 year old fighter pilot and israel's first astronaut first man in space took off today is obviously a day of mourning his family his wife and four children were in texas to to meet him his father was here in israel watching the return on television like many other israelis here israel is in a state of shock uh there's um there's really no way to describe uh the the situation other than to say that uh that uh elon ramon's uh flight in space was a uh was a bright spot in another an otherwise gloomy situation here and uh today it's uh again uh another israeli tragedy as well as an american tragedy and a tragedy for just about everyone russ we know the colonel is 48 years old what else can you tell us about him well uh colonel ramon fought in two of israel's wars the 1973 yom kippur war and the war in 1982 against lebanon he's also said to have participated in the uh the mission to uh destroy israel's nuclear reactor in 1981 i believe uh he's a distinguished fighter pilot and has been training for several years uh or had been training for several years for this flight excuse me david it's uh dan of course uh you meant to destroy uh iraq's nuclear missile capacity yes iraq's nuclear reactor right well one point we want to make uh russ and david uh is that the israeli being aboard the space shuttle is a continuation of a

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the space shuttle is a continuation of a program by nasa that has gone on for some years to take aboard u.s space shuttle missions various people of other nationalities yes uh there's been a wide variety of people of various nationalities taken aboard the space shuttle this by way of nasa uh the u.s government and for that matter the people the united states saying to the world that while we lead and we clearly lead in a preeminent uh in human exploration of space that we want to make it as global as possible and that indeed was part of what this flight today that has ended so disastrously i don't think there's any doubt we can now say there's ended disastrously since nasa says the space shuttle is down somewhere in north texas they've found debris they've lowered the flag to half staff and if you don't mind i'd put up that photograph again that the crew posed for their mission picture colonel rick husband navy commander william mccool navy captain david brown kaplana chava dr chava lieutenant colonel michael anderson navy commander laurel clark and then the israeli air force colonel ilan ramon all of them to use the military phrase missing in action not yet officially presumed dead however the fact that nasa has lowered the flag half staff in florida is seen as pretty indicative of what they believe has happened but we will know more in about maybe 15 to 18 minutes when nasa has scheduled a news conference i want to point out to you they haven't said it start precisely 11 30 uh eastern time one can understand uh that nasa having been hit by a a disaster a catastrophe uh that will take them a while to determine the facts and there's nothing that speaks louder in one of these situations russia than the facts and up to now we have very few facts about what could have

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very few facts about what could have happened to the shuttle very few facts david hawkins you still there yes i am right one question for you you mentioned a few weeks ago that it was almost a national holiday in israel when it was uh known that colonel ramon would be on this flight given the world situation right now even though this is a continuing program by nasa to bring folks in from other countries to fly on the shuttle missions given what is going on in the world right now was there concern in israel for his safety were people wondering about that yes there there was concern about uh the safety of the flight uh my understanding is is that nasa laid on extra security uh for the very reason that uh an israeli astronaut was on the flight so it was uh something foremost in many people's minds russ david hawkins thank you russ mitchell david hawkins we know from past experience when we have these kinds of situations that there is a tendency just to you know feel their time just kind of lather on i wonder if it isn't time for us just to take a pause just on the air here take a pause think about these brave astronauts and what their families are going through at the moment and we will do that from time to time during the day let's recap now for those of you who may have joined us soon

late or just joined us still no official word from nasa but it would appear the space shuttle columbia has been lost nasa now says that shuttle debris has been cited in north central texas nasa says that the shuttle is definitely down mission control remember mission control is in houston the launches go from florida but mission controllers in houston mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida the shuttle was over texas at the time

[01:36:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5762s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5762s)

the shuttle was over texas at the time people as far away as louisiana report having seen it you know the shuttle flies so high it was at roughly 200 miles plus up when this happened so people as far away as louisiana report watching the shuttle as they had gotten used to doing on these shuttle missions and then seeing it thinking something was wrong one reported seeing a ball of flame and other said it seemed to go to pieces nasa has declared quote an emergency it scrambled rescue crews from the dallas fort worth area and elsewhere the flag next to the countdown clock at mission control has been lowered to half staff president bush who was at camp david in maryland mark nola reports from the white house our cbs man there that the president is on his way back to the white house and the president is receiving updates nasa has put out a public advisory to people in texas to avoid any possibly hazardous debris that may have come from the space shuttle and let's make this very clear that some of this material for reasons that may be too boring to go into can be toxic and that's the reason nasa is saying that to anybody in the north texas area any place else that thinks they have any debris see any debris stay away from it nasa has ordered flight controllers to retain all their records there were seven astronauts aboard including the first israeli astronaut as we've mentioned partly because of his presence security surrounding this mission was tight a spokesman of the homeland security department said this morning there's no indication that this was a terrorist incident or that any foul play was involved keep in mind if there's any doubt in your mind that the shuttle at the time uh it broke up and started down to earth was far beyond the range of uh any missile that could be fired from earth we've had several people kind of call in say well what could have been brought down by missile the the answer is no not at that altitude now we here at cbs spoke earlier in the day with the fort worth resident sam knight he described hearing what he called two sonic bones and then he said he saw

[01:38:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5880s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=5880s)

two sonic bones and then he said he saw two large vapor trails in the sky at the same time the shuttle columbia had been on a two-week science mission which until now had been deemed a success because virtually every experiment worked the astronauts did their job the orbiter was an altitude of more than two hundred thousand feet plus as i mentioned it was traveling at some twelve thousand five hundred miles an hour when contact was lost cbs news correspondent bob orr is in our washington newsroom bob is uh aviation expert what can you tell us about the situation at this moment bob dan at this moment like the rest of america i think the federal authorities are just trying to get a handle on the tragedy that happened this morning in the texas skies we've heard the warnings and we can't say them often enough it's very very important that people that may be near some of these debris fields stay away from that there are hazardous materials but beyond that there's another component the authorities at this time are focused on the seven astronauts and their families and of course that has to be their primary mission but beyond that then there are the big questions about what happened and in order to know what happened they need to be able to literally put the pieces back together they need to go through the recovered debris and figure out what caused this tragedy after challenger blew up in 86 there were a lot of critics who thought that the the space program just had too many risks since then 88 flights of the shuttle have taken place without any problem until this morning the fact that it was on landing this is a glider on landing the fact that the breakup happened there is quite curious on launch of course uh there are the giant propulsion rockets a lot of combustible materials on landing far less fuel on that shuttle just uh small fuel pods used for maneuvering of the shuttle so they'll be looking at things like possible mechanical failure some kind of catastrophic breakup

[01:40:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6000s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6000s)

catastrophic breakup might there have been some kind of pressure problem but i want to emphasize at this point nobody and i mean nobody even has a good clue as to what went wrong there the first thoughts of course with the astronauts and the families beyond that the investigation will begin and it will be lengthy dan bob orr reporting live from the washington bureau the associated press quotes former astronaut john glenn is saying that he and his wife had just turned on their television to watch the space shuttle columbia return home this morning when communications in the craft were lost as it soared across texas of course we all know john glenn a former united states senator and national hero as the first american to orbit the earth astronaut and former senator glenn said in a quote we were going to watch the landing and then it got into trouble continue to quote him anytime you lose contact like that there's a big problem of course once you went for several minutes without any contact you knew something was terribly wrong and indeed something was terribly wrong the shuttle is down somewhere in texas nasa reports finding some debris didn't say where and no other details are available flag has been lured to half staff next to the launch site in florida and we await official word from nasa which is scheduled to begin a news conference sometime in the order of 10 or 11 minutes from now bob mcnamara our cbs news correspondent in dallas what have you learned about their those near ground zero in and around north texas this morning apparently thousands of people either heard the shuttle explode or saw it break up in the skies those who saw it break up say it looked like a falling meteorite that just disintegrated some report that the force of the explosion shook their homes now the search at this at this time appears to be in this uh southeast texas area there are reports that pieces of debris have come down in the town of nagadochis itself that's in

[01:42:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6120s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6120s)

town of nagadochis itself that's in southeast texas deep southeast texas in the piney woods region pieces of apparent structure were found anywhere from three and a half feet long to a foot and a half feet long there was a man we heard a little while ago standing next to what he said was a piece of angle iron which appeared to have fallen from the sky and that was in downtown nagadochis there are also reports of possible debris being found around the areas of palestine texas tyler texas lufkin also jasper there were reports also there could be a debris down in a field near corsicana where there was an apparent fire people who were driving along interstate 45 which is the main artery between dallas and houston say they saw or heard the shuttle come down also people who were driving on i-35 which is between dallas-fort worth and waco say they heard or saw it there is also a report in plano which is just north of dallas a large suburb where a piece of debris apparently came through an apartment building and started a fire there we called there a little while ago and the fire department said that they were putting foam on it now they have warned people that if pieces of debris are found to stay away from them don't touch them because of the exotic fuels involved and apparent toxicity so that's what we hear now dan it all appears to be in southeast texas over near the texas louisiana border in the corsicana area nagadoches in particular dan bob mcnamara and dallas well as bob says uh that the indications now are that most of what's left of the shuttle will be found in southeast texas in the general area of carsakana and nacogdoches for those of you who don't know that part of the world it's a heavy pine tree country part of southeast texas has a particularly

[01:44:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6240s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6240s)

particularly almost impenetrable forest swamp area known as the big thicket in this area it may be a long while just knowing that area it could be a long while before most even most if not all of the debris is found because of the nature of this part of the state the texas louisiana border heavily forested with pine there are swampy as i say almost jungle areas in that that part of the world and so the indication being that most of the shuttle debris may i underscore the word maybe in that area would indicate that it may be a long long while before they're able to come up with even most of the debris let me pause and say that we're trying to be as careful as we can in our coverage this morning to tell you what we know what what are facts and separate that out from what is speculation we're trying to keep speculation to an absolute minimum if possible but even when we have reports that we believe to be true i think as a journalist it's important to say that in these kinds of situations frequently frequently the first things you hear turn out to be not right or at least not quite right so when we talk to you here and do our best to report to you it's in that context and from that

perspective russ mitchell who's been working this story all morning long russ once again we became we as a people became we americans kind of blasé about right uh exploration in space it was the shock of the shuttle in the mid 1980s but then things have gone so well since then that we just begin to think well it's you know it's sort of like a bus going up in space right they leave regularly they return regularly and we've been reminded this morning that it's very very dangerous these became very routine to us and to see the shuttle land as we have many times before it seems so easy it almost looks like a huge airplane landing one that can almost land anywhere but as bill harwood has told us several times today that's

[01:46:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6360s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6360s)

has told us several times today that's not the case this is something that requires a special landing area and once again we are reminded that this is not routine well i heard someone once describe the shuttle as a space truck and in a way it is that is it hauls equipment up and comes back but that really um diminishes uh the accomplishment of putting these huge vehicles up in space and getting them back in sort of routine fashion but then from time to time we're reminded how dangerous and in this case even deadly it can be rob perillo a local meteorologist in the area of lafayette louisiana and he is the meteorologist for our lake charles lieness louisiana station now are you with us there rob yes i am with you dan and rob i want you to go over again what you saw and you have a photograph showing the breakup of the shuttle yeah we're dumping off the video right now to our local videographers um basically uh i look for the shuttle when it comes in across southern louisiana every time it has a trajectory to come across our region either comes in uh via dallas i'm we're in lafayette louisiana and uh it'll either come in through dallas or san antonio and i shot the video earlier this morning and uh knew what i saw when i saw it what you're looking at right now is actually national weather service uh radar doppler radars picking up on the plume of the shuttle as it was moving to the east southeast so that line that you see on your screen there from just south of tyler on through the toledo bend area is actually the plume of uh the space shuttle and probably we're shooting that at about 20 000 feet i want to make clear because uh i in no way want to confuse our viewers what you were looking at what you looked at there at the end is a satellite photo taken for meteorological purposes primarily that was a satellite photo couldn't tell much but you could for those of you who are acquainted with

[01:48:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6481s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6481s)

for those of you who are acquainted with space flight could see the indication that shuttle was breaking up now i'm told that uh rob carrillo has his own video which we're this is the uh meteorological shot if you will right rob you you have some video of your own which you're trying to get to us and we look forward to seeing yeah i pretty much from my angle saw a singular uh system coming in and then moving into multiple projectiles uh pretty much coming at us and again these are national that's the that video right there is what i saw again coming at us we see it about 100 miles away when it's crossing the texas louisiana border and again uh i saw that particular shot i saw the multiple uh uh projectiles spreading out in a in a manner that was quite random and uh then what i went ahead and sent one of your directors was the national weather service radar site that we just showed and the doppler radar is actually picking up on that smoke plume that you see right there that's the smoke plume and that's the direction that more than likely the debris would be falling in across southeast texas perhaps into western louisiana and as you mentioned earlier dan a very thick area very woodsy area a lot of evergreens in that area so maybe some time before uh debris is uh completely discovered rob as as we await your video this is russ mitchell by the way rob as we await your video what can we expect to see on that what did you see through the lens well i i you know it's unfortunately i'm an amateur videographer so uh it wasn't the best video in the world but nonetheless it did indicate a singular uh plume and then multiple uh plumes and and of course fireballs heading in different directions and in fact i did see a little bit of a turn to the northeast on the plume and i did hear one viewer talk about that as well a viewer from uh northeast texas also described that so some of it seemed to take a sharp left turn off

[01:50:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6600s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6600s)

turn off or turn to the north and east right at the end of when we saw this thing breaking up a little bit past this point this is where i picked up uh watching it and uh and then uh as we got in a little bit closer this is what i saw and that turn again a little bit off to the east northeast there you again you see on the national weather service radars in fact we've confirmed this on not only the lake charles radar but also shreveport fort polk and dallas the same plume and in all likelihood that is the plume of the debris plume and uh the vapor plume uh left from the shuttle rob dan rather from from this satellite picture uh superimposed over a map all you can do is use your knowledge and give a knowledgeable opinion from this it would appear most of the debris is going to be over you say the toledo bend area of southeast texas yeah i would say draw a straight line right along that we are picking up on those doppler radars uh winds at about 20 or 25 000 feet so that's pretty much the line that the shuttle was coming in and and since uh from what i'm hearing with respect to some of the debris discoveries right now i would uh estimate that the bulk of the debris would be in eastern texas and perhaps streaming into western louisiana across uh say vernon parish uh kind of tough to tell when you get projectiles that are moving at five or eight thousand miles an hour how quickly and and where they're going to land but nonetheless we you know confirmed from what we see on the video that we see on the also the weather service radars that again your your plume and your debris plume uh maybe across that part of eastern texas into western louisiana rob brillo thank you very much we're going to put up the picture again of the shuttle crew these are heroes and whether any of them are found alive or not which now seems on the basis of the facts we know highly

[01:52:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6720s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6720s)

on the basis of the facts we know highly unlikely highly unlikely but while nasa officially acknowledges that the shuttle from these proud and heroic people were aboard is down its debris scattered over southeast texas and perhaps part of louisiana along the texas line that nasa has not said anything about the fate of the crew but the indication is we've mentioned several times before that they've lowered the american flag to half staff near the launch site would indicate what nasa believes to be the situation now the nasa news conference scheduled for roughly 11 30 a.m eastern time obviously it's not started at that time we see no sign that nasa is ready yet nasa just simply sent word earlier that they were hoping to have a news conference enter around the 11 30 eastern time 10 30 central time period so we await that and at that time expect to have more information but russ lets you and i go down quickly now as we turn this half hour mark of what we know what we don't know the shuttle got into trouble over north texas just after 9 a.m eastern time just after 8 a.m central time this morning eyewitnesses described seeing what they thought was the shuttle in trouble one this chris linville said from the viewpoint we had they were looking out in the backyard we did see some flames we thought maybe it's from the engines or something we didn't know we knew it was flying over and we're actually looking for the shuttle passing by we had no idea a lot of eyewitness comments to that extent now nasa didn't say anything for a long while other than that gave an indication he thought something had happened and that the flight was overdue for its landing it was after all on a long if you will glide pattern if one can call it that to the florida landing spot then came word that uh nasa believed that shuttle was down then came word nasa said the shuttle was down

[01:54:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6841s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6841s)

nasa said the shuttle was down fate of the crew still unknown and unspoken officially by nasa nasa then put out word at least one piece of debris what they believe in debris was found at an undisclosed site in north texas what else the as you pointed out the shuttle was scheduled to land at 9 16 eastern time around nine o'clock eastern time nasa discovered that they had lost contact with the shuttle at that point we had the initial report from nasa from mission control saying we've lost contact but the hope was this was a temporary thing and contact would be restored but of course that never happened bill harwood if i can bring you in just for a moment we we spoke of this you know earlier during routinely during that last approach by a space shuttle what's going on at mission control they're all monitoring their data you know it's a computer-controlled descent on the space shuttle it has four flight computers that are really doing all of the flying uh the commander and the pilot are really along for the ride until the shuttle gets down to an altitude of about fifty thousand feet when it's directly over the runway basically so at that altitude everybody's sitting back watching

the data making sure that everything's working properly and of course occasionally checking in with the crew to chat with them and just make sure everything's going okay so very calm you know the mission control center is calm the astronauts were probably enjoying uh the ride they all say on reentry it's a pretty spectacular ride you get that bright plasma sheath they call it very superheated brightly lighted incandescent air around the crew cabin of the space shuttle it puts on quite a show i'm sure they were all monitoring their instruments but enjoying that until whatever happened happened and of course we still don't yet know what happened but russ i've been listening to you talk when i add one thing the telemetry stream from the shuttle the data that gets radioed back to mission control automatically by the flight computers i would be very surprised at this point if they don't have some idea uh what happened uh when they come when they're comfortable enough to share that with us of course we don't know but there is simply so much data coming

01:56:00 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=6960s>)

but there is simply so much data coming down i don't believe that whatever happened could have simply happened with no warning i believe there's probably information buried in that data and by now they may well have some inkling of what happened bill harwood dan rather stick in here with us but we have a sergeant just moved on the wires from the associated press dateline nacogdoches texas an old indian trading post one of the uh oldest settlers settled areas anywhere in texas deep behind what's sometimes called the pine tree curtain down there dateline nacogdoches residents say debris including bits of machinery and bits of metal have been found strewn across the city that's nacogdoches early this morning hours after nasa lost contact with space shuttle columbia james milford the owner of the local barber shop in downtown nacogdoches right around the square there says it's all over nacogdoches the debris there are several little pieces some parts of machinery there's been a lot of pieces about three feet wide unquote that's in nacogdoches nasa declared an emergency after losing communication with colombia as the ship soared across texas at an altitude of about 200 000 feet while traveling and keep this in mind traveling at six times the speed of sound at that speed and at that altitude any even small thing going wrong in a spacecraft can be disastrous so what we have here is apparent confirmation that large parts of the debris are spread over an area of deep east texas in and around nacogdoches carcicana stretching over toward the louisiana line as we still await the news conference from nasa this photograph you see in the encircled part the space shuttle as it was coming down this is a satellite photograph taken for meteorological purposes but it shows you that streak in the left-hand corner of the screen of the shuttle coming down and bill harwood you've made this point

01:58:01 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7081s>)

and bill harwood you've made this point repeatedly during the morning but again i'm keeping in mind so many people are joining us in progress that because the space shuttle has a short wings for kind of stability people tend to think of it in terms of an aircraft but in fact uh if anything goes wrong it begins to drop there's no joy in saying this it really drops like a stone it really does dan you know when they line up on final approach like everyone is familiar with seeing when they're getting ready to land on the runway they come in at almost a 20 degree angle i mean that's seven times larger than a commercial airliner because it has to keep its speed up the wings these short stubby wings don't give it the lift of a full-size aircraft and so it really does drop like a rock i've heard it described as flying a brick i've flown the shuttle in the simulator at the johnson space center before and it has that sense to it you really are come it looks like you're flying straight down when you're on the flight deck of that thing it's it's impressive and dan i wanted to point out one thing from what you were saying a few moments ago about the debris you know traveling at 12 500 miles per hour at an altitude of over 200 000 feet i'd be very surprised if the footprint they call it the area where the debris lands isn't spread out over a pretty wide area and of course i think one of the big concerns right now dan is recovering or finding the crew module that crew module on the space shuttle the area right up here between the nose and the start of the payload bay was actually designed to withstand 20 g's 20 times the force of earth's gravity in the case of the challenger accident the crew module pretty much stayed intact until it got to the ground i'm certainly not suggesting this would this will help the crew but if the crew has in fact uh perished uh they obviously would like to uh recover the bodies for the family members and as well as part of

the investigation and i'm sure that's another thing they're going to really be focusing on today bill let's talk about that debris nasa has advised residents of north texas if you see any of this debris don't touch it what kind of materials are we talking about here really rocket fuel primarily although there's other materials on board that are dangerous too but when the shuttle is in orbit it has quite a few thrusters in the nose area and in the back that use hypergolic

[02:00:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7201s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7201s)

and in the back that use hypergolic fuels they're called it's a rocket science word it just simply means when you put them together they burn you don't need a spark plug it makes for a simple engine design but those hypergolic fuels are extremely toxic if you breathe it if you even get some of it on your skin it can cause serious problems so i think nasa is just playing it safe if any small tanks of this material survive to reach the ground if the shuttle did in fact break up at altitude they're just telling people to stay away from it and it is extremely dangerous bill dan if you'll hold on just a second i do want to get right back to you but let's go quickly again to the white house and cbs news correspondent mark knoller mark has the president arrived back at the white house and are you getting any flow of information there well unfortunately we're not even getting audio out of mark notice so we can't know whether he's getting any information or not these things happen with live television let's go back to bill harwood bill there are going to be people say in fact some no doubt are saying it already you know there's something inherently wrong with the u.s manned space program because quote we keep having these accidents number one it's not true that we keep having these accidents that the challenger explosion in 1986 was the last uh you know disaster uh that we had before today but there's also the question of well the russians have had a very active space program a manned space program do they have these kind of accidents dan you know it's interesting i think people lose sight of what a reliable spacecraft the shuttle is this was the 113th mission and they've had one failure no other major rocket system in the world has a record that good the russians of course have a good launch record but remember their whole space program has been based on going to a space station they only launch rockets every six months or so nasa's been launching the shuttle five or six times a year and doing it with remarkable success it is a high risk venture you know in

[02:02:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7320s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7320s)

it is a high risk venture you know in the journalism world you know when something becomes routine or seemingly so people stop thinking about that level of risk but it's always been there you know at launch that thing weighs four and a half million pounds when it's loaded with fuel and it goes from zero to 100 miles an hour straight up in 10 seconds at the end of eight and a half minutes when it gets to orbit it's going eight times faster than the bullet from an assault rifle that's an amazing thing that we all lose sight of and when it returns to earth it goes 25 times the speed of sound and then glides to a landing at 200 miles an hour on the runway that will always be risky regardless of the rocket system bill dateline again nacogdoches texas which is the central city in southeast texas in deep east texas the national ocean police spokesman greg sowell says that there were several reports of falling debris in nacogdoches that's about 135 miles northeast of houston he did not know exactly how many reports there were of citizens calling and saying they'd seen debris in and around nacogdoches nakadochis has enacted its emergency operations center and is sending emergency crews to the reported debris according to the police spokesman in the texas city at this point we're just trying to get it out to the public to not touch or tamper with this debris and we've said it before we're going to say it again to anyone you must not absolutely must not touch your tamper with this debris number one there's all kinds of toxicity which is to say really hurtful stuff on some of this debris and number two of course anytime you touch the debris you run the the risk of making it more difficult for investigators to find out exactly why this disaster happened this morning i do want to mention that while we said some time ago that nasa was trying to put together a news conference for 11 30 eastern time 10 30 central nasa emphasized the time don't hold us that precise time that press conference by nasa in which

[02:04:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7441s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7441s)

that press conference by nasa in which we hope to find out a great deal more about what happened this morning has been delayed there's no word yet on a new time when that news conference happens you of course will see and hear it here on at cbs news now we have another person who says they're an eyewitness andrea robinson is in the cbs news bureau in dallas ms robinson are you there yes i am could you tell us exactly what you saw when you saw it and how you saw it well i knew the space shuttle was going to be going overhead at 803 dallas time and um i was laying in bed and i heard the house shake and i was half asleep so i thought it was my daughter playing gymnastics upstairs so then she came down and she said mom did you hear the house shake and the boom and i said yeah i thought it was you and she said no it wasn't i said well the space shuttle is supposed to be going overhead she said why didn't you tell me so we ran outside i live on the golf course in los calinas texas and we saw the trail coming down and it was a real wide trail and at that time i was thinking that's really strange that the the trail is coming down from the sky instead of going across but i really didn't know anything about i had never seen the space shuttle before so i just kind of left it at that and then i came in the house and my friend called and she said turn on the news and i said oh yes the space shuttle was supposed to be going over and we just saw the trail and she said no it just exploded and we were just devastated i want to ask you you mentioned that you knew that the space shuttle will be coming right over the house you know there's been a theory for a long time that americans lost interest in the whole space program even the manned space program but what you said indicates to me that you and your daughter were very much aware of what was happening in the program and when it was happening yes we they they announced it on the

[02:06:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7561s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7561s)

yes we they they announced it on the local news that if you wanted to see the space shuttle that you would be able to at 803 dallas time so um i was going to get my whole family up but um you know it was saturday morning and i was just a little bit behind schedule we thank you very much for being with us ms robinson you're welcome thank you we're holding for a potential nasa news conference the national aeronautics and space administration as soon as they can put together facts so important in these circumstances as soon as they put together some facts they intend to hold a news conference the space shuttle is definitely down down pieces of it over southeast texas debris found what is said to be debris found in nacogdoches texas deep in east texas [Applause] nasa has acknowledged the shuttle is down nasa says it has a search mission underway the fate of the astronauts officially unstated and officially unknown however unofficially nasa has lowered the flag to half-staff next to the launch site in florida and that there is a report that a piece of debris sparked a fire in an apartment building in plano that's just north of dallas texas we have not absolutely confirmed that that apartment fire was caused by debris it's believed that it was let's go to ed crowley who's chairman of the mit aeronautics department he's at our cbs news station in boston massachusetts thank you for being with us mr crowley good morning what can you tell us about this situation to put it in context to give it some perspective well uh as has been pointed out dan it's early in this uh series of events and as you commented some time ago the things we learned early are often not the final facts but what we know so far is that this was the 107th flight of the space shuttle

[02:08:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7680s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7680s)

107th flight of the space shuttle this is there have been 88 successful flights including in the last few years a spectacular series of successes that have gone to the space station as part of its assembly sequence we've seen the video a number of times and the video tends to indicate as i watch it that something broke off the shuttle early the shuttle then went along for some time and then there was a more dramatic event which indicates a loss of attitude control of the shuttle it then seems to break up into a number of pieces and then begin to descend i want to point out that ed crowley who's speaking to us from our cbs affiliate wbz great news television station in boston massachusetts is an engineer he worked at the johnson space center and helped train the columbia mission astronauts mr crowley it's dr crowley isn't it that would be fun dr crowley you've done well in putting this in an overall perspective let's review why this mission went what was it that they sought to accomplish in space well this mission was one of a string of missions to the to the space station there was some resupply there was some science performed on the on the on this mission this is one

in which a visiting crew as the israeli astronaut in this case often go and participate in it's a sortie to up to the space station for resupply and provisioning and as well as the conducting the conduct of intermediate science uh science objectives uh over the course of the stay on orbit about two weeks uh dr crawley you mentioned earlier while emphasizing we simply don't know what happened uh and i think fair to say we're not likely to know what happened for a very long time if ever given the fact that it now appears to be a fact that debris is

[02:10:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7800s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7800s)

appears to be a fact that debris is spread over at least parts of southeast texas east of dallas and north of houston and possibly on into louisiana but you mentioned a couple of things i want you to go back over you said that there are question areas no one is saying that we conclude that these caused what happened today but you said there are a couple of questionable areas could you go back over those for review for us please well the the nasa team will immediately freeze the data at jsc they have a very well established procedure for freezing all the information that they have so as to have the best possible chance of recovering the sequence of events that led to this tragedy now unfortunately uh because this was at a time when the spacecraft was just at re-entry interface where it was just entering the top layer of the atmosphere this is a time of maximum heating and the aerodynamic pressure is building on the spacecraft and this period is characterized always even on a normal flight by a loss of transmission a loss of signal from the spacecraft so without having seen the telemetry yet i suspect that one of the difficulties in reconstructing this will be that this was in a period with either reduced or or no radio contact and reduced telemetry they'll have of course ground track information and so forth while we await what we believe will be a nasa news conference at some point it's already been delayed from the hope for time of about 20 21 minutes ago i was talking to dr ed crawley who's with mit the aeronautics and aeronautics chairman in massachusetts institute of technology dr crawley there were two things in the sequence of events involving this shuttle mission that now raise at least a question mark in one's mind and i want you to put these in context for us first of all a crack was discovered on shuttle discovery not on this shuttle but on another shuttle and because that you know i think we're talking about a very

[02:12:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7920s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=7920s)

know i think we're talking about a very small crack was discovered all the shuttles were then investigated for cracks and this mission was given a go-ahead is that the kind of thing that investigators be looking at or is that too far back well dan one of the things the nasa team will will do in the next hours and days is collect all the information they have the information from pre-flight inspections from the launch telemetry and videos and start to identify what they call potential root causes any any recent crack or damage like this they see will certainly be on on that list as will be the potential for an explosion on board the spacecraft on the orbiter as will be the potential for a failure of the thermal protection system and this is the time of flight when the thermal protection system is most important these uh these three things any any immediate previous defects and a possibility of explosion of loss of the thermal protection system the the insulation literally around the spacecraft will be at the top of their list to follow as leads now what about the report uh it wasn't just a report that after this this shuttle had been launched there was some concern about up piece of installation my understanding small piece of insulation perhaps unaccounted for after the fuel tank so necessary for the launch itself came off do you know anything about that and is that not the kind of thing or is it that they'll also be looking into well i don't know the specifics of this case but let me explain what happens which is the tank the large tank on which the orbiter is actually attached has a thermal protection system of its own mostly to keep it cool before launch and uh of course in the launch sequence the tank is separated and falls into the indian ocean so it's long gone but if during the launch during the the maximum aerodynamic forces that occur during launch a piece

[02:14:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8040s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8040s)

forces that occur during launch a piece of that insulation fell off as i have also heard reported this morning and impacted the thermal protection system the famous tiles that we remember from the early days of the shuttle if a piece of the insulation fell off and impacted the tiles that would be a point of suspicion that the nasa investigators would follow up very quickly as to whether that led to a series of events which subsequently could have caused a failure of that thermal protection system again we don't we have no idea at this point whether that's in fact the string of events but it would certainly be on the list of early considerations they would look into dr crawley again and i know you agree with this at the risk of being redundant we want to underscore nobody knows what caused this accident how long might we anticipate the investigation to take well in the next few days there will be a decision whether nasa will be charged internally to conduct this investigation into these events or whether more of a presidential blue ribbon panel as we had in the case of the challenger accident will be commissioned i think that's something that in the next few days you'll hear from the white house whether they have confidence that nasa will be able to do this and be charged or whether a larger national enquirer will be caused a lot of the time scale of what happens next depends on that decision if it's an internal nasa investigation it will likely go months the challenger investigation went years uh we have had three now accidents in our spacefaring history american history of a human loss and on average the last two have run about 18 to 20 months as the scope of the investigation we're talking to dr ed crawley of massachusetts institute of technologies crawling stay with us for a second because i want

[02:16:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8161s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8161s)

stay with us for a second because i want to share with you and our viewers that bill harwood our cbs men on the scene at nasa in florida says that sean o'keefe who is the nasa administrator will hold a press conference now nasa is hoping at 1 pm eastern time that would be 12 noon in the central time zone yes previously nasa said it was hoping to hold a news conference as early as 11 30 eastern time and now repeat for emphasis and of course our cbs news coverage will continue straight on the nasa administrator will hold a news conference hopefully at 1 pm eastern time and at that time we may learn more although i don't think anyone should anticipate learning a whole lot more you just never know but one wouldn't want to build expectations too high because nasa is still the whole national aeronautics and space administration is in a state of shock about this disaster that has happened with the space shuttle also datelined cape canaveral florida a cus official says space shuttle is quote gone you can say well didn't we already know that but the fact of the matter is that we have not had a senior u.s official from cape canaveral he's unidentified but saying it that flatly saying that the space shuttle is quote gone we've reported to you previously that various people in and around nacogdoches texas now report to finding debris many reports of debris over the city we have not confirmed that what these people say they see is in fact debris but there's so many reports from nacogdoches confirmed by the police department people calling from quote all over town in that east texas city that it seems highly probable that what these people are seeing uh is in fact uh debris we'll go back to dr crawley and i really appreciate your time doctor there are now only three space shuttle vehicles left is it likely any new ones will be built and if any new ones are not built is that is the whole program in some kind of mortal danger well that's a very interesting question

[02:18:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8281s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8281s)

well that's a very interesting question dan and it's uh obviously a little early to weigh in on that the last space shuttle the one that replaced the challenger was commissioned in about 1987 or eight and finished in the late 80s or maybe 1990 and it was built using some spare parts that had remained from the original construction they had essentially laid in some spares it's now been about 13 or 14 years since that time and i think it would be unlikely that nasa would try to commission the construction of another orbiter at this time still too early to say nasa has just completed a reprogramming of its efforts to replace the shuttle which involved building sort of an intermediate space plane mostly to transport crew to orbit back to go to this to the space station uh and delaying the development until the next decade of a fully reusable replacement for the shuttle i suspect what's more likely to happen is this series of events will cause sean o'keefe the nasa administrator and his team to re-examine those recent decisions and see if the timing and pace of that replacement

schedule is still appropriate dr foley from mit if you'll stick with us please we have some news to pass along just a moment ago we reported dateline cape canaveral that a senior u.s official says that space shuttle is quote gone uh there has still been no official word from nasa keeping in mind that nasa now says that it hopes to hold a news conference at 1 pm eastern time 12 central but this same senior u.s official says there is no hope for either the shuttle or its crew of seven let me repeat that for emphasis c u s official says the

[02:20:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8402s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8402s)

for emphasis c u s official says the space shuttle is quote gone he says there's no hope for either the shuttle or its crew of seven let's pause for a moment to absorb that and let's put up the picture of the heroes russ mitchell will read the names of those aboard the shuttle as the word comes from a senior u.s official that they in the shuttle are gone commander of the flight colonel rick husband this was his second mission as you can see there 45 years old amarillo texas lieutenant colonel william mccoool was the mission pilot this was his first mission 41 years old his hometown is san diego california and as we're going to see here these folks come from around the country and around the world david brown commander david brown was the mission specialist 46 years old from arlington virginia right outside of washington d.c his first mission commander laurel clark a doctor dr laurel clark commander first mission 46 years old from racine wisconsin kalpana chawla engineer aerospace engineer her first mission 41 years old she was born in carnal india but she became a citizen of the united states michael anderson lieutenant colonel michael anderson mission specialist his second mission 42 years old he's from out west spokane washington naylan rahman colonel rahman from tel aviv israel his first mission 48 years old he was part of this nasa program to involve more countries in the u.s spacecraft program because of him

[02:22:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8521s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8521s)

him because of him his nationality being from from israel security was beefed up on this flight however there is no official word from anyone as we've been reporting this morning as to what may have happened here and the thought of terrorism while not been completely ruled out by the white house certainly is being seen as something that is not a possibility not very much of a possibility and there we are once again the seven astronauts six americans and one israeli citizen and two of those astronauts or american women let's go to bill harwood uh in florida bill if you're there bring us up to date on what you're hearing what you've learned yes dan i'm here no real change yet the flight controllers of course are still looking over the data as you say nasa administrator sean o'keefe knew on the job just appointed recently uh is obviously faced with his biggest challenge i'm not even sure the right word to pick for this is going to address the media and the nation really at 1 pm eastern time but no word yet on what might have caused this or or what the impact might be bill harwood as you sit there from your vantage point earlier you told us you looked out the window and the flags were flying at half staff what other activity can you see there from where you are none at all russ this is a saturday at the space center the only people that would come in today is the landing team they were all out at the runway which is a little distance from here and of course in what they call the firing room just over my right shoulder the the launch control center if you will is where the people are behind me of course is the launch pad that colombia took off on on january the 16th when this flight began 16 days ago and as you say when they rolled out and lowered that flag to half staff that was a a terrible sight to see very reminiscent of what happened on january the 28th 1986 when they lowered the flag and that was the first sign at all that we had uh that nasa thought the crew was lost bill and rather

[02:24:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8640s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8640s)

bill and rather commander rick husband had just one other space flight under his belt uh how and why did he become the commander of of this mission that happens depends on the merit of the flyer dan a lot of times a commander is their second flight their commander and of course in the early days of the program uh when they didn't have a lot of flights and an experienced astronaut base the commanders were first-time flyers so that in in and of itself was not unusual at all before any flight it's estimated that the commander and the pilot do more than a thousand approaches to a runway in nasa's shuttle training aircraft which is a business jet

that they've rigged up to handle just like a space shuttle on final approach has the same instrumentation you wear as the spacesuit it's just like landing the real thing more than a thousand of those per flight so i don't think there's any concern at all about his competence or technical ability and plus at that phase of the entry the computer is flying under the control of its computers the shuttle i should say they don't take over manual control until they get to an altitude of about 50 000 feet and that doesn't happen until just a few minutes before actual landing so they were sitting there watching their instruments as this whatever happened happened and not actively involved in flying the shuttle at that point well bill let me make explicitly clear and underscore that the thrust of the question was not that uh commander husband in any way i completely understand he was not prepared an air force colonel from amarillo you have to know we do know that he was prepared by long hours long including hours of preparation but i seem to recall i may be wrong about this that the original commander for this mission got ill or something perhaps i'm wrong about that no we had a couple of flights last year where some some crew members got replaced uh one space station crew member got replaced at the last minute because of illness and the pilot of a shuttle mission late last year had to be replaced again because of an illness issue but in this case rick hussman's been commander signed to this flight since i think 2001 our as i recall

02:26:01 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8761s>)

think 2001 our as i recall uh he's been in training for this mission all along well let's have no doubt uh that on the word of the nasa official who says not only is the space shuttle gone but the crew is gone uh that commander husband and others all others in the crew died heroes quickly giving you a look at the situation at the moment nasa has scheduled a news conference for now one o'clock eastern time 12 in the central time zone nasa declared an emergency after losing contact with the crew and sent search teams to the dallas fort worth area and now search teams are headed uh more to the east in east texas ed roener whose nakadochis texas airport manager has said that some type of tank ended up on his runway he said he's talking about some sort of tank off an aircraft mr rohner also says that there are pieces of debris all along the entrance road to the nacogdoches airport national guardsmen have been called out to protect the debris a search for debris is underway throughout the area east and north of dallas stretching on into at least parts of louisiana gary hunzinger of plano texas said that he saw the shuttle flying overhead he said he saw two bright objects flying off each side of it he thought that they might be some sort of pursuit aircraft at first but of course the shuttle was flying at 200 000 feet plus so there could be no other aircraft up there benjamin laster of kemp texas says his barn started shaking and he and his family ran and started looking around lester said he saw a puff of vapor and smoke and a big chunk of material fall and the situation at this hour is that a senior u s government official says the space shuttle is quote gone the same official says there's no hope for either the shuttle or its crew of seven

02:28:03 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=8883s>)

the next event uh in terms of which we hope to have some official information to get perhaps additional facts on this disaster scheduled for one o'clock eastern time russ i'm reminded that ronald reagan president reagan in his speech to the nation on the day the shuttle challenger exploded killing all seven of its astronauts quoted the following the crew of the space shuttle challenger honored us by the manner in which they live their lives we will never forget them nor the last time we saw them this morning as they prepared for their journey and waved goodbye and slipped this early bonds of earth to touch the face of god unquote president ronald reagan with the face challenger eulogy back in the mid 1980s it was january 28th 1986. bill harwood if you're still with us in florida uh this is a picture of the shuttle challenger exploding sometimes when television is difficult to tell what's today and what's yesterday this was the shuttle challenger exploding uh just after the commander had given the full throttle forward 73 seconds into the flight it exploded in christ to earth quite a different situation today these are the old challenger explosion pictures today we have only a few photographs from today high in the sky but this was on dissent the first time that shuttle has had difficulty or certainly anything approaching this kind of difficulty on dissent now these are pictures from today bill i was

going to ask that keeping in mind that challenger the challenger shuttle exploded on january 28 1986 and then this happens in early february uh willow will not one of the things to be looking into is is there something especially dangerous we didn't know

02:30:00 (<https://www.youtube.com/watch?v=dWC7VAB3qf8&t=9000s>)

especially dangerous we didn't know about with shuttle launches in deep winter even though they're in florida well dan i think in this case uh i wouldn't think that at all the temperatures here when the shuttle took off and leading up to launch you folks up in new york would probably consider balmy it got a little chilly for us but it it wasn't anywhere near on a level that would affect a piece of aircraft equipment or or even the space shuttle i don't think in this case winter time was an issue at all i think this was whatever happened today was was a mechanical failure of some sort uh that took place and i think the timing is is purely coincidental bill the the uh columbia was up at two hundred thousand more than two hundred thousand feet today when we lost contact with mission control at what point at what altitude potentially does weather become a factor well they have to get much much lower in the atmosphere for that to happen remember in a commercial airline or even the concord which flies up to sixty thousand feet or so fifty or sixty thousand feet they're up above ninety nine percent of the weather i mean there's not much above sixty thousand feet uh maybe a little bit but not much and certainly nothing along uh columbia is tracked well weather becomes an issue when they get down in the manual flying range of fifty thousand feet or so they get there just a few minutes before landing literally in sight of the runway when they get to that point and as a matter of fact they were worried about wins aloft a little earlier today at that point when the commander rick husband would have taken over manual control to guide the shuttle but certainly nothing at 200 000 feet that would that would be an impact i can't imagine what it could be bill harwood stick with us down in florida if you will we want to recap now very quickly for those of you who may have joined us in progress the associated press is quoting the senior u.s official is saying now the space shuttle columbia quote is gone that same official is quoted as saying that there are no survivors among the astronauts a nasa news conference is now scheduled for one o'clock eastern time at 12 noon central time about today's developments mission control lost contact with the shuttle just minutes before it was to

02:32:00 (<https://www.youtube.com/watch?v=dWC7VAB3qf8&t=9120s>)

shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida to get the picture it was in rapid descent over north texas headed for florida it was due to land in just a matter of minutes given the speed it was traveling when eyewitnesses said they looked up saw it in the sky and then saw what obviously was some breakup nasa immediately declared an emergency scrambled rescue crews from the dallas fort worth area and elsewhere and others are now heading toward eastern texas shuttle debris what's described as shuttle debris has been found in southeast texas in the carsakana and nacogdoches area a lot of it is reported to be in and around nacogdoches there's also a report that a piece of debris sparked a fire at an apartment building in plano just north of dallas texas that's being checked and double checked to see in fact whether that fire was started by some kind of falling debris nasa has put out a public advisory to people in texas and elsewhere to avoid any possibly hazardous debris that may have come from the space shuttle we're going to say again some of this debris is toxic if you're in an area and when we said in east texas and elsewhere possibly there's some degree possibly over the texas louisiana line if you're in any place where you think you have seen some of this debris stay clear of it stay away from it president bush he was at camp david in maryland is on his way back to the white house and is receiving updates the flag next to nasa's countdown clock has been lowered to half staff there were seven astronauts aboard including six americans along with the first israeli astronaut partly because of his presence security surrounding this mission was tight but a spokesman for the homeland security department said flatly this morning there's absolutely positively no indication that this even could have been a terrorist incident or that there was any foul play involved now on the phone now from new mexico we have colonel mike mullane former shuttle astronaut on three missions he was once aboard shuttle discovery twice on shuttle atlantis colonel mulhane thank you for being with us good good morning dan since you've been

[02:34:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9241s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9241s)

good good morning dan since you've been there and so few humans ever have describe for us as the shuttle is reaching that point where it's in the what's been described as the glide pattern over north texas what the astronauts are feeling and what they're doing at that moment when we come out of orbit we actually start half a world away from our landing site we turn the orbiter around fire the orbit motors for a couple minutes to slow us down and then turn the orbiter back forward lift the nose up so that the belly is presented to the atmosphere we're coming in about 40 degrees nose high and of course you've got the heat tiles on the belly that are protecting you initially for the first probably a good 20 or 30 minutes you really don't feel much or see much you're the air is so thin up there we're falling through it it's it's around when you start getting down around that 250 000 foot point you start getting this white hot air wrapped around you you're in the cockpit looking out it's a fantastic light show you can see this white hot glow of the superheated air around the cockpit and the shuttle is just doing these roll maneuvers as it loses energy as it falls toward the landing site it is a autopilot re-entry the pilot can take control at any point they can it's a hot stick they call they grab the stick and they have control of it but there's no reason to do that because you can't see the runway anyway so you might as well just let the autopilot fly it so a nominal re-entry it would be on autopilot the crew would be sitting there monitoring the hydraulic system monitoring in the navigation system the re-entries that i had were very benign very quiet get a little bit shaken when you get deeper into the atmosphere but it's uh it's not like launch it launches much more dynamic event and reentry is much more quiet and stable what is the gravest danger on re-entry as one has done it three times tell us what the greatest danger is

[02:36:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9360s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9360s)

greatest danger is well obviously you you're going from five miles per second in speed 18 000 miles an hour and you're up around 200 miles and you've got to dissipate all of that energy all of that speed and the potential energy they call it the altitude you have to you have to get all that down to zero altitude and zero speed after a 12 000 mile glide halfway around the world and obviously there's a lot of things that could go wrong on something like that uh hydraulic failures uh you're dependent upon the hydraulic system to operate these flight controls on the shuttle when you get deeper in the atmosphere and higher up you're dependent on steering jets to fire to maintain the attitude it's the shuttle has to enter very very precisely it can't it's not like a fighter jet that you can just kind of fly around at different uh attitudes it's very has to be has come in the atmosphere to very close tolerances in attitude or else aerodynamic failure could occur it could pitch out of control and be destroyed and what would cause that obviously nasa will be looking at that there's many different things that could happen failure the of the steering jets uh structural failure uh data processing i mean the heart of the machine is a computer if you have problems with it there's four of them it's unlikely all of them would fail but i mean you could have some type of software error or or computer problem that would pitch the vehicle out of control i mean there's many many different things that could fail that would cause this re-entry to to obvious uh to become a disaster and now some i'm sure it's going to be looking at every possible detail that that would cause a problem like that colonel moan when the space shuttle first reenters it and it goes into what's called the aura phase where you have this strange mysterious light around it and then you emerge from that as an astronaut were you thinking of possible death

[02:38:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9481s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9481s)

thinking of possible death well i have to admit uh that uh launch is what most terrified me people ask me was i scared on a shuttle launch and i tell them no i wasn't scared i was terrified and i flew three times i was terrified on the first launch i was terrified on the second launch and i was terrified on the third launch i have to admit that in orbit it's very relaxing i didn't ever feel like my life was imminently at risk when i was in space and reentry you get your heart rate up a little bit but again i always felt like the chances of something bad happening on re-entry are much less than they are on launch i mean on launch it's a controlled explosion i mean you're converting four million pounds of propellant in just eight and a half minutes to a speed of 18 000 miles an hour and an altitude of 100 miles or so that's a huge energy energy exchange and obviously a lot of bad things can happen on launch and so i was much more apprehensive on my launches than i ever was on

my on my re-entry the re-entry is uh very it's not it just doesn't have that dynamic about it not the noise and the shaking and the violence that you have on on on liftoff and on orbit and search and launch but you said general mulhane that on reentry that i think your words were it gets your heart beat up a little is the translation that your heart's pounding like a hammer well it's certainly um it is it is very uh not very but it is uh much more apprehensive you're much more apprehensive on re-entry than you are in orbit orbit is relaxing i mean assuming everything's going fine again i never had any sense that that my life was threatened in in space i know that sounds bizarre probably a lot of people when you consider you're in a vacuum and you're hundreds of miles above the earth but it was very relaxing on re-entry you do get more apprehensive but it's not the same as launch at least it wasn't for me

[02:40:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9601s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9601s)

as launch at least it wasn't for me now i i realized that you know things could go bad on on re-entry but again it i just didn't have the sense of threat that i did on on launch colonel we're going to put up again the crew photograph for this mission and as we put that photograph up i want you to tell us briefly if you will what it takes how much it takes to be an astronaut well i didn't know any of the people that were lost today on columbia i left in 1990 challenger obviously affected us my group because there were four from challenger were killed from my group all astronauts i think that it's a passion it's something that you want to do so badly that uh you can't turn away from it it's something in your blood i think that describes most astronauts in fact i've told people before that i think the fear of not making the trip far exceeds the fear of dying doing it i know that sounds bizarre but i think people who climb like mountains and mount everest and these other people that do these things that you know it always amazes me i'm not a mountain climber it always amazes me that you know how in the world do these people do this you know climb up to mount everest and i think about i know how they do it to them it's a passion they have to do it and that's like i think we lost the audio of colonel mahan mulhane from new mexico as he was speaking so eloquently about what it is what it takes to be an astronaut what it drives those who have this passion to go into space as the crew of this shuttle mission did dateline the kennedy space center quote it's gone that's what a senior u.s official says about space shuttle columbia the shuttle broke apart in flames on its way to landing all seven astronauts

[02:42:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9720s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9720s)

astronauts on board were killed the official says debris strewn across texas and apparently some other states has been positively identified now as being from the shuttle that's why this official can say it's gone the shuttle and that all seven astronauts on board were killed there's yet to be any official word from nasa but this high u.s government source says there is no hope for either the shuttle or its summer member crew that yes we've known that in our hearts and intellectually i guess rush since sometime between nine and ten o'clock that is fair eastern time but to hear someone in a position of authorities say it it um it hits the heart like a sledge nasa chief sean o'keefe is meeting with the astronauts families nation sympathy goes to them in condolences of course the families had been waiting at florida's kennedy space center for this morning's scheduled landing what they hoped would be what they believe would be a triumphal return and the news conference is scheduled for one o'clock eastern time television footage has been various television footage showing the bright light of the space shuttle over texas followed by plumes of smoke streaking through the sky debris seemed to break off into separate balls of light all of this happened just after 9 am this morning eastern time when the shuttle was just minutes from landing uh in florida you know russ machule sometimes say after dangerous trips that the most dangerous time is the closest you get to home and so it was today with shuttle columbia the debris is falling throughout north central texas nacogdoches texas seems to be an area where

[02:44:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9840s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9840s)

where a lot of debris is coming down right now we want to talk to the city manager there victoria lafollette did i say your name right victoria mcfarland thank you very much for joining us we certainly appreciate it what is going on in your town this morning as we speak this morning central time well obviously we are in an

emergency operations mode of we've active emergency management center and we're coordinating with estate and federal officials as we begin to assess how much debris we have in our particular area we do have considerable debris in nacogdoches what are people saying you saying to you that they are discovering pardon me what are people discovering in academias what kind of pieces of debris do they think they're spotting i'll sort the pieces we've had pieces on our runway at the airstrip we've had pieces and roadways we've had pieces on top of buildings we've had it on people's roofs in yards and fields all sorts of sizes and shapes this level that there are reports that some buildings have caught on fire in nacogdoches as a result of the debris coming down what can you tell us about that we have no fires we've had some damage to some buildings but some of the debris that we were told that came down was still hot but we had not had any major fires of any kind what are you telling residents about this we are very concerned about people touching any of the debris we have told them do not touch it leave it alone we're asking them to notify us at 911 we are having to catalog and keep up with where all the pieces are located and so we're having people contact us to give us that information and then in turn we're sharing that with the appropriate state and federal officials we understand that some of this debris may in fact be debris rather may in fact be toxic what are you hearing from nasa or from officials about what kind of materials we're talking about here uh the last that we've heard we don't

[02:46:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9960s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=9960s)

uh the last that we've heard we don't believe there's any radioactive materials there are some chemicals that we are concerned about and we are working through the texas department of health to get more information out on that if for some reason someone has come in contact with we're telling them you know for the time being to please you know wash their hands with soap and water anything they may have touched immediately and i'm sorry ma'am go ahead and that's the main thing the thing we definitely want to get out we do not want people touching anything if it's in a roadway or something take a shovel or something and push it out of the way but do not touch it okay victoria left philadelphia sorry dan good question from this russ uh no but we do thank you for staying with us this morning john roberts our chief white house correspondent is at the white house where they've been at least an informal briefing john what have they told you well good afternoon to you dana president bush arrived back here at the white house about a minute ago after the 90-minute trip from camp david where he was supposed to spend the weekend the flags here at the white house just a few minutes ago were lowered to half-mast and the president is expected this afternoon to make an address to the nation it's quite possible that that will be an address from the oval office uh in a briefing a little while ago we were told that president bush talked personally to nasa administrator sean o'keefe nasa has been designated the lead agency in the investigation with which the white house promises is going to be careful and thorough condoleezza rice the national security adviser was up at camp david this morning she preceded the president down here she has been huddled with the national security secretary or the homeland security secretary rather tom ridge who has talked with governor rick perry of texas to express his condolences and to coordinate recovery efforts he's also talked with the governors of neighboring states to put them on alert because the debris field is so large it's possible that the debris could have crossed state borders as well there have been mid-level uh

[02:48:03 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10083s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10083s)

as well there have been mid-level uh consultations so far between the united states government and the government of israel uh expresses of condolences for the loss of elon ramon the 48 year old fighter pilot who was the first israeli astronaut who was on board the space shuttle and president bush now that he is back at the white house expected to consult with his top advisors and it's expected that he will be making a personal telephone call to israeli prime minister ariel sharon to express his condolences personally so what to see from the white house later on today is an address from the president most likely from the oval office but dan i should say that people around here are just stunned trying to make sense of what happened these things are are typically routine uh the most that anybody watches for is that the two sonic booms as the the shuttle reenters the atmosphere and puts on that show and then of course the landing no one ever thought that anything like this could happen because there's just been no sense that the the re-entries uh have been

anything uh but routine but as bill harwood was talking about earlier today two hundred thousand feet twelve thousand five hundred miles per hour there's a lot of dynamic pressure on that airframe a lot of heat as it starts to come back into the atmosphere and it's it's obvious that something went terribly terribly wrong there's been no indication from anyone here at the white house that there was any kind of terrorism involved in fact quite to the contrary they say that there's nothing to suggest that it was terrorism the shuttle was of about 35 to 40 miles high and short of an intercontinental ballistic missile there's not much that would fly that high dam so it's highly unlikely that there would have been anything from the ground that was involved and of course the security around the space shuttle all of the systems are checked and triple checked highly unlikely that anything could have been brought on board that would uh

[02:50:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10200s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10200s)

been brought on board that would uh have precipitated such an event but this afternoon the president will be addressing the nation so we'll keep watching that here from the white house dan john roberts at the white house john mentioned that the president either has or will soon be expressing his condolences to the leaders and people of israel and of course he'll be expressing his condolences to the families of the other astronauts all americans as we and the nation do and will be doing in the days that follow on the telephone one was now dr don parise two-time shuttle astronaut world renowned astronomer and dr parise and i do hope i pronounce your name correctly you knew some of today's astronauts well i knew two of them dan rick husband and kalpana challa were acquaintances of mine but of course and i had met all of them i had an experiment on this particular flight and when the entire flight crew came to the goddard space flight center to oversee some training on that experiment i had met all of them during that period of time dr parise there will be the inevitable questions revived now about why do humans in space why not do these experiments why not do this exploration uh by robot why put humans in space and this may be as good a time as they need to at least briefly review why we have it as a national purpose to explore space with humans well there's there's more to it than just the experiments that we do in space you know uh it's certainly true that many of the experiments that are done in a human tended manner on the space station or the space shuttle could have been done robotically but on the other hand as we look toward the distant future humans have always been explorers and

[02:52:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10322s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10322s)

humans have always been explorers and if we think back in the earth's history in in human history at all of the the changes that have occurred due to humans actually going and exploring places whether it's columbus making his way across the ocean to the united states or any of the other early explorers that that forged trade routes and so forth uh much of human history is uh is has been developed by the exploratory nature of of us and and we continue to do that so it's not it's not only the the narrow-sided view of the particular experiments that could have been done on the ground instead of in space it's a it's a matter of gaining a lot of experience and and gaining the ability for humans to extend their presence beyond the earth as one who's done it twice what drives people what what motivates one to want to be an astronaut and to go through the long grueling training for just the chance just a chance that you'll be catapulted up there on the catapulted to the high frontier well i think it's the adventure and the excitement the the possibility of making some significant contribution to science and to uh and to the human uh capabilities in space and it's just it's exciting and and people like to do it i don't i don't know what else to say when you were aboard for re-entry on the two flights you were afraid can you tell us about that that part of the well the reentry is actually very very smooth it's not you know there's not a whole lot going on at that point and particularly at the point where it appears that the columbia

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columbia first started having difficulties that that point is sort of the transition uh point where it's not flying so much like a spacecraft anymore and it's flying more like an airplane as the as the atmospheric pressure outside builds uh sufficiently that the aerodynamic control surfaces start to become effective uh that's sort of

the transition region there and it's not you know there's not a lot going on it's hard to imagine what sort of a catastrophic uh failure could have occurred then to to create what happened at that moment when you were aboard the shuttle twice at just about this time when you were over north texas were you thinking about possible death or thinking about with just a few short minutes from home uh well i didn't fly over texas both of my missions landed at edwards air force base but nevertheless at that point in the flight maybe 15 minutes before landing it's uh it's like you're on an airliner at that point and i was certainly not thinking of death i was thinking about getting a night's sleep because i had worked many hours before that and then had stayed up instead of going to bed as i would have normally been scheduled to in orbit then i was staying up for the entry and landing and was tired and looking forward to seeing my family and getting a good night's sleep as no doubt were these astronauts today who are now gone thank you dr don parise two-time shuttle astronaut who knew some of today's astronauts what you've been seeing as we were talking to dr parise were pictures from our affiliate in dallas this debris which has been it's my understanding confirmed as part of the shuttle's debris was near fort worth texas

[02:56:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10560s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10560s)

texas these aerial shots of the debris and you can see how large a smoked and scorched area this is by seeing it in comparison to the people who are walking around it this is from our dallas cbs news affiliate aerials of the debris on the ground now that was near fort worth and there have been confirmed now reports of debris found in east texas which showed you how far an area this debris is strewn over these are amateur pictures this amateur photograph this is the best photograph we've had the shuttle was flying along at 200 000 feet plus yes you're right this is the best incredible speed and let's just let the pictures speak for themselves for a moment as of course it plummeted through the earth's atmosphere it was burning and this is the trail that it left our good friends in the director's booth will re-rack that video i think now the amateur photographer had the shuttle then saw sparking like a star trailing vapor and smoke pieces are flying off and see them off to the side and then they plummet to earth this one of the debris sites near fort worth texas i was saying earlier russ mitchell that you see this debris site in fort worth texas then hundreds of miles to the east near nacogdoches over in the general area of the texas louisiana border all kinds of reports of debris there and

[02:58:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10681s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10681s)

all kinds of reports of debris there and nasa i don't know officially but people at nasa have emphasized that there may be debris you know as far as louisiana perhaps arkansas it's just that it's going to be spread over a very wide area which again this is the third time i think at least the third time we're showing you this amateur video that was taken i'm not quite sure from where this video was taken somewhere in north texas also again authorities say if you come in contact with this don't touch it it could be very dangerous i think we want to go to bill harwood our cbs news space expert who's been so magnificent in reporting this story this morning there's no other word that describes it before doing so i think that we should re-rack that video one time and this is the best available evidence we have of what happened to the shuttle and just let it play for a minute well i was hoping that we could rack that in top and let it play but here it is dan this is bill harwood can you hear me lump in your throat time as the path of the shuttle to earth is clear we go down to bill harwood in florida

[03:00:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10800s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10800s)

we go down to bill harwood in florida bill dan it's terrible to watch that one thing that i'm struck by watching it occasionally you can see a bright reddish flash that's very characteristic of the kind of fuel the shuttle carries igniting hypergolic fuels when they burn or when a launch blows up here from the air force on an unmanned rocket they always talk about the big red cloud and that's that's very indicative of fuel tanks on board the shuttle maneuvering fuel tanks coming apart in the atmosphere in the field igniting that's that red that red flash is is hardly and hardly can't mistake it for anything else bill harwood dan if i could just very quickly i wanted to point out the only thing we've heard all morning or even thinking about that was out of the ordinary

is this foam from the external tank falling and hitting the leading edge of the left wing shortly after launch should be interrupting but people will say foam on the tank that foam used to insulate for the heat that's exactly right you know these are super cold propellants hundreds of degrees below zero and the orange look of the tank the actual outer few inches of the tank is a foam insulation that looks orange a piece fell off during launch and hit the left leading edge of the wing there's a tremendous amount of heat on those leading edges during entry right about the point where they lost contact you cannot help but wonder and again no one likes to speculate in an aerospace accident because the first impressions that you've said repeatedly are often incorrect but certainly something we want to keep in mind as they look through the data in the telemetry is to find out if that could have possibly had any impact today just simply because if there was an area of damage and the kind of heat they see on entry that that could in theory be a factor here well bill we want to bring in dr ed crawley of mit aeronautics and aeronautics chairman at mit dr crawley can you give us some observations that might put this in context for us well dan this video that we've seen now on from several different angles will be a very important piece of evidence you might remember

[03:02:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10920s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=10920s)

piece of evidence you might remember that after the challenger accident where video was in fact important in the accident investigation there was a decision to have even more and higher quality video at the time of launch and this particular video you can see it right there there's a little piece of something that falls off early and just about in here this the spacecraft appears to uh to bloom as if the attitude of the spacecraft changes and here we see what appears to be other parts of the spacecraft on independent tracks so they'll they'll go back and replay this video frame by frame hundreds of times to see if they can discern from this what that first little bit coming off of might have been what the sequence of events was to see if they can get any flight dynamic information to see if they can they can filter the the video to see if they see the nose pitch up or pitch down to try and develop an understanding of the sequences of events here dr crawl if you'll hang in there with us in boston and bill harwood in florida also hang on as we play this amateur video again which is going to be a strong piece of evidence for the investigation by nasa on the telephone with us now is mr doug havilland who is the uncle of columbia astronaut laurel clark navy commander laura clark a medical doctor was a rookie astronaut that is making her first flight i want to point out that mr havilland's son was killed at the world trade center on 9 11. mr havilland thank you for being with us this morning tell us about your niece laura clark well she was accepted in the space program became an astronaut she was very enthused about it this is what she wanted to do and she was dedicated to the task and she knew the risks that were there but she felt that

[03:04:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11042s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11042s)

that were there but she felt that they were very safety conscious and and this is what she really wanted to do how proud you must be of her yes the whole family is my sister her mother was in arizona and she had her misgivings i think but she was really proud of laurel as taking this on well naturally members of the family would have their misgivings did you ever hear the commander laura clark talk about her misgivings or the danger of the flight well but she felt that you know nasa was so safety conscious that she did not live in dread or anything like that i'm sure [Music] last night i picked up on the internet email that she had sent back to earth just shortly before this all happened and she starts out hello from above our magnificent planet earth the perspective is truly awe-inspiring this is a terrific mission and we are very busy doing science around the clock and so that expresses her attitude i think as to how she felt about what she was doing we thank you very much for being with us and we offer our condolences to you and the members of the family as we do to members of all the families of the seven astronauts aboard this flight including six americans and one israeli thank you dan repeat something that colonel mike mulhane a veteran and now retired astronaut said earlier he said he was quote terrified at all three launches in which he took part he said once past the launch that there was no doubt in his mind that

[03:06:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11161s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11161s)

was no doubt in his mind that that's the most terrifying moment now perhaps it was the most terrifying moment or because other reasons that challenger had exploded in 1986 just 73 seconds after launch but on launch as colonel mulhane described it to us here at cbs this morning there's this tremendous sound tremendous quaking and that's the proper verb of the space shuttle that even a brave man like colonel mulhane a veteran always terrified him said but said once in orbit it was relaxing he described a kind of floating sense and no sense of danger in orbit way up there on the high frontier and he said there was some apprehension at the time of reentry some apprehension but he said it was basically no big deal that what he was feeling on all three flights once they got to the point where the shuttle was today or something similar in case he landed in california the long glide toward home that will go so quickly he said he was thinking of just how tired he was and how glad he would be to get to sleep if that gives us any perspective on what these brave astronauts who are now gone may have been thinking and experiencing today in washington marcia smith a space agency analyst smith thank you for being with us what's the future of the american humans in space program now that we have suffered this tragedy today well of course everyone is very appropriately focused right now on the human tragedy that is unfolding but there is a very practical aspect of this as well columbia was one of the four space shuttle orbiters that now there are only three left and the space shuttle's mission for the foreseeable future is to support the space station program we do have three astronauts aboard the space station right now and the space shuttle's job really is to take more segments of the space station up

[03:08:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11281s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11281s)

more segments of the space station up into orbit to rotate the crews they rotate every four to six months and to take up supplies and to bring back the results of scientific experiments so from a practical standpoint i think everyone's going to be looking at the human space flight program and try to determine what do we do now ma'am let me ask you after the challenger explosion back in 1986 there was talk then again of the space program going away what do you think at that time turned the tide and made americans and made the u.s government say to itself you know we need to keep this up i actually don't remember talk of the space station going away at the time of challenger in fact i think everyone rallied behind nasa and the space program at the time and the public seemed very supportive of spending the money that it would take to build a replacement orbiter which was endeavor of course one of the differences now is that nasa had in the pipeline at the manufacturer than structural spares in order to help them build another orbiter because they've been thinking of building one and then decided not to and i'm not aware that there are any structural spares now to build an additional orbiter so nasa is going to have to look at its future plans how it's going to continue building the space station and servicing the space station with three orbiters instead of four that's a very practical aspect of what happened today yeah how much of these vessels cost and i think what i hear you saying is it's going to be a tough sell from here on out tougher cell i should say i don't know if it's going to be a tough sell i still think the american people are very supportive of the space program and i wouldn't be surprised to see them once again rally behind nasa but from a financing standpoint as i recall it endeavor cost about 202 billion dollars and that was in 1986 so what it would cost today starting from scratch i really don't know what that number would be they ask you this i have been hoping and i have some good reason to believe that a lot of other americans been hoping that in my lifetime we might see an american on the planet

[03:10:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11400s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11400s)

we might see an american on the planet mars does or does not what happened today make that unlikely given there's going to have to be an investigation given we have to decide whether we want to spend the money it's one of those things you know we we dream of putting a human putting an american on mars someday somehow some way now is there any likelihood that will happen in our lifetime well i think that the shuttle program is going to have to investigate find out what happened with the challenger tragedy it took 32 months before the shuttle was up and running again and then the human spaceflight program continued and it's possible probably even likely that something similar will happen this time as far as sending humans to mars nasa did not have such a program because it is so expensive and the current head of nasa emphasizes that there are certain barriers that you have to overcome in terms of how humans react to

weightlessness and in terms of propulsion how quickly you can get there and back and he wanted to spend some time investigating those aspects of possibly sending humans to mars before he ever made such a commitment so i'm not sure a commitment to that was in the offing anyway so whether this delays it for five years or 10 years or 20 years i don't know and whether it'll happen in any of our lifetimes i think is an open question thank you martha smith i everyone will continue to dream of that now for those of you who are just joining us and for those of you have been with us we remind you uh that at one o'clock about nine or ten minutes from now nasa has scheduled a news conference in which sean o'keefe who's the director of the national aeronautics and space administration is scheduled to appear yes nasa had said it hoped to have a news conference at 11 30 eastern time it just wasn't able to do that because understandably nasa wants to deal as much as possible in facts also it was the first order of business that is breaking the news officially and formally to the families of the brave

[03:12:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11520s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11520s)

formally to the families of the brave astronauts and conveying the sympathies and the respect of a nation to the families of these astronauts all of that understandably had to be taken care of before nasa can get this news conference together we are hoping and believing that there will be a news conference in about eight minutes from now the flag at half staff near the shuttle launch position in florida john roberts reporting earlier that the flags around the white house and the flag over the white house has been lowered to half staff out of respect of these seven astronauts who have died now they're gone that's a direct quote from a senior u.s official this official said that the space shuttle columbia is quote gone and that there is no hope for the seven-member crew a nasa news conference now scheduled for one o'clock eastern time mission control in houston keep in mind the launch was in florida but mission controls the johnson space center just outside of houston mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time over at the kennedy space center in florida but as we now know from this amateur video taken this is what happened to the shuttle it was just a speck way up there two hundred thousand miles up plus then the spec enlarged then it became literally a ball of fire and then a number of balls of fire as it crashed to earth nasa immediately declared an emergency scrambled rescue crews and then there began to be reports of debris we showed you earlier the debris from a large piece of scorched earth near fort worth texas now in southeast texas in the nacogdoches texas area widespread reports of debris nasa believes debris may be found as far over as louisiana maybe

[03:14:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11641s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11641s)

over as louisiana maybe arkansas not has been reported there we spoke with an academic decision manager victoria lafayette who told us that a considerable amount of debris has fallen in her city and she said there are pieces on the airport runway and in people's backyards and nacogdoches these pictures are from the fort worth area aerals taken by our cbs affiliate in dallas near fort worth so it's pretty obvious that what happened is that the shuttle began to to break up uh in north texas in over the roughly the dallas fort worth area and this is a picture of it taken from a satellite this is a meteorological satellite but you can see in circle in the left-hand part of your screen that it began somewhere over the dallas-fort worth area what happened to it no one can say it may be a long time if ever anyone can say this gives you the high shot then here's the amateur video of the shuttle coming down to earth and crashing to earth at the altitude and speed at which he was breaking up debris is expected to be found over a very wide area of texas and possibly louisiana and possibly even other places it's so stunning to see this that the imperative is just to be quiet for a moment so looking at this amateur video it's no wonder that residents of texas louisiana and arkansas all say that as they were out early this morning to watch the space shuttle columbia come over the area they saw flames then heard a window rattling door shaking boom kind of muffled broom early this morning about the time the space shuttle columbia broke up on its

[03:16:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11761s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11761s)

space shuttle columbia broke up on its way to trying to land at cape nava florida one eyewitness john fiorillito of carrollton just north of dallas said it was like a car hitting the house or a big explosion it shook that much james milford the owner of a barber shop uh milford barber shop around the square and nacogdoches said it's all over nakadochis he described little pieces some parts of machinery some pieces about three feet wide said this eyewitness left from this crash of the shuttle we believe we're about four minutes possibly less now from the start of this national news conference if it goes off as scheduled certainly we'd understand if it slipped some that there probably no doubt some people even at this late hour what four hours after the crash you were only now beginning to be aware of what happened and for others who may have heard about it earlier just beginning to sink in uh what's happened and you said it earlier seven brave asteroids when that u.s official said they're gone that was pretty official at that point right now we want to go to early show anchor renee seiler she's in our cbs news dallas bureau renee what are you seeing what are you hearing from your vantage point russ i got to tell you what happened to me early this morning i was talking to my sister on the telephone and she says uh we were i said are you watching what's happening and she says yes i was she lives in southwest fort worth and she says i heard a boom as i was just you know we're doing mundane saturday tasks waiting for the garbage truck and she heard this loud boom and wondered what it was and all of her neighbors and everyone gathered outside didn't see anything debris or that sort but certainly they did hear something in southwest fort worth but what we're hearing we're getting reports that this debris field encompasses like 180 to 200 miles which goes to speaks to what dan was talking about just a couple of moments ago

[03:18:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11880s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=11880s)

just a couple of moments ago the video that i think you're watching right now was shot from our cbs station here in fort worth and is actually not in fort worth but palestine texas and we understand that there is a hundred mile stretch where they are setting up command posts because obviously the danger here is they're trying to keep people from getting out compromising the integrity of the investigation touching it and potentially hurting themselves as you've heard a number of people say that the volatile nature of this debris they don't want people out there touching it or messing around with it when they're trying to figure out exactly what happened here sheriff john hobson of anderson county which is uh where palestine is said that he did in fact have reports of some folks that went out saw this not sure what it was touched it and are now seeking treatment and again as dan was talking earlier james milford from milford's barber shop said yes that uh he he's quoted as saying it's all over nacogdoches some pieces are smaller than others but some are three feet wide another quote from a 29 year old dennis there jeff hancock who says that a piece came through his roof and he says it was four a four foot long metal bracket a waiter at the nacogdoches cafe said about 50 people had gathered around looking at the debris so you can imagine what the scene is like 180 miles south and east of dallas as little parts of this debris are beginning to be discovered and we had been monitoring the local affiliate here as well and and someone found something in arlington so possibly in fact uh some of that debris has come down here in the dallas fort worth area arlington being about arlington being about what 20 miles west of dallas that's correct that's correct it's between dallas and fort worth yes early show anchor renee saller in the dallas bureau thanks a lot and we're standing by here at cbs news for what we believe will be the start of nasa's news conference coming up in a minute or two that is scheduled to start in about a minute we'll see whether or not they're ready to go sean o'keefe

[03:20:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12001s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12001s)

not they're ready to go sean o'keefe the director of nasa is scheduled to preside at that news conference to tell us to tell the nation tell the world what he knows and what he does not know about this disaster with the shuttle this morning in our washington bureau our aviation expert bob orr is standing by he's been working the phones going to sources bob what can you tell us dan what strikes me is the enormity of the investigation that is in the offing here we've looked at the radar images from shreveport louisiana and we have that image we want to share with you and it shows what the officials see in terms of a debris pattern we've seen this image the upper left-hand corner is just south of tyler texas and as it moves down across the screen as far as we can tell it ends somewhere near alexandria louisiana now the homeland security folks say that they're

getting calls from five different states that the debris may be spread out over hundreds of square miles this image right here is very telling the weather experts tell me that the bright red in the middle is very likely a high-intensity aerosol plume as the columbia blew apart in a couple hundred thousand feet above the earth and that fuel started to come out that bill hardwood was talking about the radar picked it up is what would amount to very heavy precipitation what this means for investigators is they're going to have to in effect quarantine an area encompassing much of east texas much of louisiana perhaps up into arkansas and try to secure this because this is right now an investigation scene they'll have the data stream the telemetry from the columbia which will give them strong clues as to how the systems were performing and what perhaps may have gone wrong the sequence of failure if you will but to corroborate that they'll need the physical evidence perhaps from this scene here near palestine or near fort worth in texas in other areas where they pick up the physical remnants of what's left of the columbia and try to match that with the data information to try to get to the end of the day to

[03:22:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12121s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12121s)

to try to get to the end of the day to find out what caused this terrible accident it's worth noting that in 1986 when challenger exploded it was at a lower altitude there were very very strong high resolution television pictures of that explosion which allowed the investigators to kind of zero into that plume of fire if you remember which gave them a very strong idea where to look for how that shuttle came apart this was at two hundred three thousand feet above the earth even the best pictures that we've seen today give no real hint as to what went wrong up there so it will be a very very difficult challenge i'm told that nasa likely will handle the lead of the investigation but obviously will be supported by the people from the defense department the ntsb the faa and all other agencies they've been in touch all morning on the phone and just now i think they're getting ready to launch the investigative team dan bob or thanks uh bill are you harvard are you still with us in florida yes i am dan yes sir uh hang on one thing that given uh if you're working the phone bill don't hesitate to go to it an information flow is a lot more important than what i was about to ask you if you need to take that phone let me get right back to you dan if you don't mind no problem bill hardwood working hard for us in florida bill of course is one of the ranking journalist authorities on the space program a long time working it for cbs news and is doing so this morning so we'll come back to him in a moment but what i was going to say is that we've done it before but i want to do it again because i think it's so important we do not know what caused this people tuning around the dial no doubt we'll hear some speculation we've tried to keep speculation to a minimum here but obviously it's inevitable that there will be some but it is just that speculation for example the two things that have been mentioned earlier there's absolutely teetotally memorably no empirical evidence or meaningful eyewitness testimony that indicate they had anything to do with this crash but two areas that will be now reviewed include the crack that was found on the shuttle discovery not on this

[03:24:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12241s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12241s)

discovery not on this shuttle but on another one and when they found that crack they made of course investigated all of the shuttles and then gave the okay for this launch that no doubt will be reviewed the number two and both bill and bob orr and others have sort of zeroed in on the question about after launch shortly after launch the most dangerous period in any shuttle mission there was an indication that some of the insulation that keeps the the heat of the shuttle from destroying the shuttle and as those side fuel tanks so necessary for the launch to sort of catapult the shuttle shut it up and the space came off a small piece of that insulation hit one of the wings that we know that's a fact and at the time uh nasa authorities said well you know we're gonna have to look into that because in effect i'm quoting directly here we want to make sure that that doesn't cause any problem down the line but they looked into that that it's impossible to overstate how closely these flights are monitored every nanosecond they're up there and that even after that insulation came off the wing it was determined the mission should precede a pace and go on there was no indication of any difficulty with this flight until the fateful seconds this morning over dallas so we just want to make it very clear that while you may hear some speculation along the way in fact nobody knows what happened to it and nobody may know for a long time if ever i would add a third level of speculation because there was an israeli

citizen on board this flight there are going to be some people you may hear as you turn around that perhaps terrorism was involved in this security for this shuttle flight was beefed up because of the presence of the colonel from israel however the homeland security department says there is is basically discounting that that there is no way where this vessel was at the time it broke up that anyone a bomb could have hit it john roberts pointed out sort of an inner ballistic missile it's unlikely

[03:26:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12360s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12360s)

inner ballistic missile it's unlikely that terrorism is involved but again another area of speculation you're going to hear about at this point the bottom line we don't know what happened and won't for some time i'd be very surprised if an act of terror is not ruled out officially at some early stage because given the height of the shuttle how long have been up there 200 000 feet plus up traveling at many times the speed of sound while no one can say well rooted out completely i'd be surprised if that doesn't happen pretty soon now we have on the telephone uh from waco in central texas jeff foreman who is an eyewitness to what happened this morning mr foreman are you with us there yes uh now i know that you have uh some amateur video that you took and that we hope to have on our air very shortly but in the meantime take me from the very first seconds first of all were you outside to see this what did you see when did you see it what did you think well it started off just like a normal shuttle reentry which we've watched several times before the vehicle is in one piece you see it glowing as it reenters the atmosphere then you see a couple of parts separate from it very small ones and that alone may or may not be that unusual but several seconds after that several more pieces come apart it starts leaving much more of a vapor trail than it just breaks into multiple pieces obviously that is not normal that's is the vehicle basically disintegrated or broke apart uh mr foreman i do want to point out that you're not exactly an amateur when it comes to this that uh you you were in fact uh you you have a degree in physics do you or some science yes uh applied physics that's correct right uh and your wife julie was there with you is she with you now uh no she's not with me at the moment but yes she was there we were watching it together so now as i understand it uh when did you start taking the video as i said you took some video we're showing uh amateur video taken in another place by another person which clearly shows what happens i assume you either are seeing this or have seen it and we hope to have your video to

[03:28:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12482s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12482s)

and we hope to have your video to show to folks somewhere along the line perhaps in a short time as we await the nasa news conference if you ride with me here for a moment i want to explain to our viewers nasa had first scheduled a possible news conference at 11 30 eastern time that slid by didn't happen then they scheduled one for roughly one o'clock eastern time now of course is eight minutes after one but we are standing by director sean o'keefe of nasa to come forward with the news conference we think it will be sometime shortly we can't be sure that in the meantime we continue to talk to jeff foreman uh in waco and uh mr foreman what you went outside to see this because you knew the shuttle would be passing roughly over your port of texas at that time correct i watch these things when they come in for reentry because they're spectacular even if there's not a systems failure like this they're fun events to watch i wasn't expecting this but it did happen this morning and when did you first sense that there was trouble uh when i first saw the uh i i think the video you show are currently showing the amateur video there's a small particle or a small part that drops off way before any of the separations when i first saw that i thought that's unusual i've never seen that before on even a night landing before but uh maybe a piece of ice or something small that's okay when multiple pieces started coming off i thought that is really highly unusual that should not be happening again you can't tell but from the ground what's going on up there you can't see detail of the vehicle itself so you just basically wait for the news and see the other tip off is uh the sonic boom as it passes is usually two separate discrete booms and uh after the vehicle passed we heard seven or eight distinct ones which that just means several large pieces are traveling to the atmosphere at greater than the speed of sound which again should not be the case jeff foreman uh an engineer with a degree in physics describing what he saw this morning and we hope to have his uh amateur video of the explosion and crash of the shuttle

[03:30:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12600s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12600s)

crash of the shuttle to air very shortly in the meantime let's go back to bill harwood in florida bill you have additional information dan i've been speaking to several nasa sources folks who are involved in this mission and and while i want to be very careful about what we say here and not speculate unduly there apparently was a loss of telemetry uh this morning during the entry from the left wing from systems in the left wing at the base of that wing of course on both sides are elevons that are hydraulically powered wing flaps if you will that help the shuttle as it bikes through the atmosphere to bleed off energy as we've been discussing today i don't want to i don't want to go too into what i've heard because you never know this early in if the details might be might change at some point but it's looking like uh from what i'm hearing anyway some sort of massive structural failure in the wing area of the shuttle the left wing but it's not clear at all what might have caused that or how it got triggered again this is from sources at nasa that are indicating that the focus of attention right now is on the left wing of the orbiter and some sort of failure that may have involved the wing that led to the breakup that we all saw this morning again dan want to stress this is from multiple sources some of the details are different from what they're saying but the general thrust of it is uh focus on that left wing well bill uh i've taken our model uh of the shuttle and you're talking about what he's talking about is this left wing area i'm emphasizing again bill because it's so important when we talk about the wings and the shuttle we're not talking about wings that actually support the aircraft they're really more for stabilization people talk of wings they usually think of the wings that keep an aircraft aloft so i just want to emphasize when we talk about the left wing of the shuttle we're talking about something it's pretty short you know you tend to forget uh how this thing is laid out such kind of stubby wings and they're talking about the the the left wing now bill this is potentially such important information i'm going to ask you to go over it again in brief not because i want to repeat it for any other reason other than clarity

[03:32:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12720s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12720s)

for any other reason other than clarity and if possible put it down in language that those of us who have little or perhaps no expertise in this area can understand it because potentially and i underscore the word potentially this is very valuable information yes of course dan and and you're right absolutely to stress over and over again that this has not been confirmed by the flight control team this is what sources are telling us who worked for nasa who are in the program but the wing as you say it does support the craft when it touches down it obviously provides some lift not a lot that's why the shuttle descends so rapidly but during this phase in flight the shuttle is actually rolling and banking through the air to burn off energy they do have elevons they call them they're the wing flaps on the bottom of each wing that move as you get down deeper in the atmosphere those are hydraulically powered obviously a failure in the hydraulic system could be a factor if the leading edge of that left wing which where we know some debris hit during launch from the insulation on the tank caused any loss of integrity with the heat protection system of the orbiter that could have started a failure the last radio communications between the shuttle and mission control involved landing gear tire pressure the landing gear of course are in each wing of the orbit it's hard to see on this model but they have sensors on them that measure the pressure of tires and a change in pressure an unexpected change could indicate something going on there the one thing that my sources are unanimous on this morning or this afternoon is the focus right now is on the left wing systems in the left wing that could have led to this failure again not confirmed but it is something they're looking at well bill one more time and for those of you who've been with us all along if an apology is necessary i give it to you but frequently the first things you hear turn out to be wrong or at the very minimum not quite right no question what bill has emphasized time and time again here there's not a better reporter on the face space beat than bill he is the premier reporter on this beat his sources are telling him that in the

[03:34:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12840s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12840s)

his sources are telling him that in the very early stages just the front edge of the investigation that nasa's thinking about that left wing because they believe confirmed they believe that something happened on that left wing what caused it was it something else on the on the spacecraft at that point we simply don't know but bill with all that in mind does this or does it not present itself as part of an ongoing piece we mentioned earlier that after liftoff some concern was expressed about a piece of insulation that when the fuel tanks necessary

for launch separated from the spacecraft there's some concern that a piece of insulation had possibly hit a wing was it the left wing it was dan it was the left wing and it really happened long before the tank separated the debris we're talking about came off about a minute and 20 seconds or so into flight this is after it had gone beyond the speed of sound but while it's still fairly low in the atmosphere it's a subtle thing it's hard to see and we should not connect these two events this could be coincidence it could be the foam hit the left wing and that had nothing at all to do with what happened today but it's a big coincidence at this fault at this point but we've got to stress that until they tell us what the telemetry showed the data that's radioed down on where the wing flaps are positioned the health of the hydraulic system the landing gear tire pressure all of those things that are involved with that left wing until we find out some data there i think it's really premature to try to make any connections here at all other than to say they're looking at systems in the left wing as being a trigger or at least a participant in today's failure right that moves the story along to that extent whether it turns out to be important or not that in the very early stages of some concentration on the left wing of the space shuttle because there is a suspicion please put the word underscored as suspicion that as trouble developed on the space shuttle something whether it was the first something or not something developed possibly again marked the word

[03:36:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12961s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=12961s)

developed possibly again marked the word possibly on the left wing on the telephone now from minneapolis bruce haviland a cousin of columbia astronaut laurel clark native commander clark also a medical doctor who was on her first flight that bruce haviland was at the cape to watch his cousin's launch and we thank you for being with us mr haviland and the first thing we want to do is express our condolences our sympathies to you and your family and thank you very much for those kind words if you can tell us something about commander laurel clark obviously a tremendous and amazing woman to be a medical doctor and then to become an astronaut when earlier i was listening to a person talk about being terrified when the space shuttle took off several years ago i was on a camping trip with laurel and her son and other family members and we talked about the takeoff and she shared that feeling but she had that passion that he also talked about she loved the nasa space program and was very excited about being in space my wife and i have been getting up every day since she's been in space and turning on the tv and watching the live video my heart goes out to all the family members i met the father of the israeli astronaut at the launch and had a very pleasant conversation with him and we all felt that a collective sigh of relief as the launch was successful never anticipating what has taken place

[03:38:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13082s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13082s)

we thank you for your time for your insights and through your hope with the memory of this brave astronaut commander laura clark and again we extend our sympathies thank you very much thank you for your kind words on the telephone now from dayton ohio colonel mark brown who flew this columbia vehicle some years ago the columbia vehicle that was destroyed plummeting from space today colonel brown thank you for being with us oh you're welcome dan thank you can you give us your perspective on what's happened today well obviously this is a tremendous tragedy not only for the nasa family but for the nation as well and just like challenger it hits you at two levels first is the the loss of life the loss of friends that impacts all of us and secondly is the technical impact you know what was it that went wrong that resulted in such a horrible outcome and as your previous guests have mentioned there's going to be tremendous amount of effort expended here in the very near term to understand exactly that chain of events that led up to this catastrophe conor brown as you look at the video i'm not sure you can see it at the moment this amateur video which thus far is the most graphic evidence we have of what happened to the spacecraft there's anything in that video you know you have the spec of colombia up there and then sort of a brightness and has that developed does anything come to your mind about what could have might have happened up there yes and in fact as was pointed out by your previous guess everything has to be labeled as speculation at this point and we also have to remember that we're looking at video that is not in serial it's from different camera

perspectives all being looked at you know at different times so one of the things that nasa will be doing right now is the same thing that we're trying to do is figure out what is the actual sequence of events that occurred one of the things that caught

[03:40:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13200s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13200s)

occurred one of the things that caught my eye from one of the video is you can actually see a panel that separates and is floating down away from the orbiter in the jet stream and the panel itself is white colored instead of black colored which again talks to being from the top half of the orbiter instead of the bottom if you continue to watch that sequence then you notice that shortly thereafter there's a bright flash from the what appears to be the aft portion of the orbiter now that that suggests two things first for a panel whether it's the elevator or something else to depart from the vehicle clearly that was a structural failure the loss of hydraulic fluid for example to the elevator would not cause that something else caused that the secondary effect then is with that panel missing and the vehicle essentially being exposed to an 1800 degree environment at seven to seven times the speed of sound all the systems that have now been uncovered are exposed to that uh thermal load so the secondary thing we see which is the bright flash may actually be some of the subsystems dead in it detonating as a response to this exposure thermally so like everybody else we're going to have to watch this there clearly are indications that it may be related to the left wing but i think we can't say anything more definite than that at this time colonel brown this is russ mitchell i had a question for you when as someone who has flown the columbia describe to us what it's like on re-entry into the atmosphere um excellent question and in fairness i should say i was a mission specialist even though i'm an air force fighter pilot so i rode in the vehicle the pilots up in front get a little testy when you claim that you actually flew the vehicle re-entry is totally different than ascent where ascent is a very dynamic experience that goes on for eight and a half minutes a lot of shaking and you know fire and that kind of stuff the entry is very benign from a crew member's standpoint

[03:42:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13320s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13320s)

standpoint it starts typically over the indian ocean where the georgia burn occurs normally in darkness it's dark rather please forgive me for interrupting but the nasa press conference is starting we're going to go to that sean o'keefe who's president the circumstances we understand them leading up to this particular tragedy today this is indeed a tragic day for the nasa family for the families of the astronauts who flew on sts-107 and likewise tragic for the nation immediately upon indication of a loss of communications on sts-107 at a little after 9 00 a.m this morning we began our contingency plan to preserve all the information relative to the flight activities i immediately advised the president and the secretary of homeland security secretary tom ridge at the point after landing was due to have occurred at 9 16. spoke to them very briefly thereafter to advise that we had lost contact with the shuttle orbiter columbia and sts-107 crew they offered the president specifically offered full and immediate support to determine what the appropriate steps were thereafter to be taken we then spent the next hour and a half working through the detail and information of what we have received and bill reedy will walk you through the specifics of those operational and technical issues here in just a moment thereafter we have met with the family members of the astronauts who [Music] were here at kennedy space center and are soon to be departing to back to johnston to houston the president has called and spoken to them to express our deepest national regrets

[03:44:04 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13444s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13444s)

our deepest national regrets we have assured them that we will begin the process immediately to recover their loved ones and understand the cause of this tragedy at this time we have no indication that the mishap was caused by anything or anyone on the ground we've assembled a mishap investigation team that immediately was assembled upon the point of past the stage in which the orbiter was to have landed here at kennedy space center a little after 9 30 and that team in turn is coordinating on a regular basis on all the facts that are pertaining to this from the johnson space center and a rapid response team from here at the kennedy space center as well as participants from the marshall space flight center in huntsville alabama in

addition to these internal efforts we have also appointed a mishap investigation board an external group of people who are independent from nasa will immediately be charged with the opportunity to look at all the information that was immediately locked down right after our absence of communications each of these individuals are safety and mission assurance related officials and other federal departments of the federal government from the air force from the navy from the department of transportation and across the federal expanse the investigation team will also be chaired by an individual contacted to serve who is external to the federal agencies and we'll have the opportunity to coordinate all the information again from an external view so we'll be conducting both the internal activity as well as a external review immediately to ascertain the causes and circumstances under which this tragedy occurred we pulled together all the federal agencies and local governments as well

[03:46:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13561s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13561s)

agencies and local governments as well in discussion several times this morning with secretary tom ridge the effort is heavily underway to coordinate an understanding of exactly where the orbiter path had taken it from west texas towards the kennedy space center here in florida and to make sure that the material on the ground is secured so that the investigation can begin promptly we would urge anyone who believes they have discovered or found any material to stay away from it and to please contact local officials the local first responder groups for emergency services and so forth have been authorized and directed by secretary tom ridge to assist in all manner the federal emergency management agency is coordinating that effort on be part of the department of homeland security it's here this morning with the families of the astronauts and their friends it started out as a pretty happy morning awaiting the landing of sts-107 and we had highly anticipated their return because we couldn't wait to congratulate them for their extraordinary performance and their excellent efforts on the science mission on this very important flight they dedicated their lives to pushing the scientific challenges for all of us here on earth and they dedicated themselves to that objective and did it with a happy heart willingly and with great enthusiasm the loss of this valiant crew is something we will never be able to get over and certainly the families of all them we have assured we will do everything everything we can possibly do to guarantee that

[03:48:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13681s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13681s)

we can possibly do to guarantee that they work their way through this horrific tragedy we ask the members of the media to honor that too to please respect their privacy and please understand the tragedy that they are going through at this time we will help the media assure that be the case as well we trust the prayers of the nation will be with them and with their families and again a more courageous group of people you could not have hoped to know than the families of these crew members an extraordinary extraordinary group of astronauts who gave their lives and did it in a way that they knew exactly the risk but never and ever do we ever want to see a circumstance where something like this could ever happen and we diligently dedicate ourselves every single day to assuring these things don't occur and when they do we have to act responsibly accountably and that's exactly what we will do to give you more of the operational detail of what has occurred here since 9 a.m this morning the associate administrator for space flight a former astronaut retired captain united states navy former test pipe test to flight pilot bill reedy who has commanded two separate missions uh previously and uh as an astronaut and is now again our associate ministry for space flight has worked with me all morning along with all of us here at kennedy space center to work through the details of the events as we know them and to present to you the facts that we understand them again the technical details that are being worked very diligently now will be covered again at 3 pm this afternoon out of the johnson space center but then we turn it over to captain bill ready

[03:50:19 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13819s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13819s)

a truly difficult day for all of us uh many of us were standing alongside the runway waiting to celebrate their triumphant return after a 16 day science mission i think you could tell from the down link that they loved what they were doing and they thought what they were doing was extremely important pushing back those

boundaries in science at nine o'clock we heard that they had lost data from the spacecraft and it appears that that was at about two hundred thousand feet about mach 18. the loss of data was somewhere over north central texas and at the planned landing time of 9 16 we initiated our contingency action plan called the rescue coordination center and initiated a search and rescue effort sadly i think from the video that's available does not appear that there were any survivors we have currently impounded all the data including all the pre-flight certification of flight readiness for sts-107 and at this point i'd have to say it's too early to speculate about the exact cause obviously we're looking at all the data that we have available those people that have videos those people that have still pictures will urge you to contact nasa so that we can coordinate those things that might be available and to reiterate what the administrator said those people that may find debris do not touch it do not move it

[03:52:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13921s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=13921s)

touch it do not move it contact your local authorities have them impounded and secure the area so that our technical specialists will be able to piece together the puzzle so that we can resolve what happened our immediate focus is on the crew families and spent some time with them the president called i'd have to say the families are bearing up with an incredible amount of dignity considering their loss we all grieve for them we all pray with them for the crew but one thing came across loud and clear when visiting with them is they knew that the crew was absolutely dedicated to the mission that they were performing and i think you could see that in the video downlink they believed in what they were doing and in the conversations with the crew and their families they said that we must find what happened and fix it and move on and we can't let their sacrifice be in vain today was a very stark reminder that this is a very risky endeavor pushing back the frontiers in outer space and after 113 flights unfortunately people have a tendency to look at it as something that is more or less routine well i can assure you it is not each and every time i flew each and every time my colleagues flew we treated that with the respect that it deserved from a professional standpoint and i have to say that as the one responsible for shuttle and station within the nasa that i know that the people of nasa

[03:54:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14042s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14042s)

that i know that the people of nasa did everything possible preparing for this flight to make it as perfect as possible my promise to the crew and the crew families is that the investigation that we have just launched will find the cause we'll fix it and then we'll move on thank you and we know you all have questions and we will have a news briefing at three o'clock and we'll give you that opportunity at that time thank you well nasa has finished its news conference uh and obviously and understandably emotional captain bill reedy former astronaut said that they lost data at something over two hundred thousand feet and he said and i quote we must find out what happened and moved on sean o'keefe who is the director of nasa says the loss of this valued crew is something nasa will never be able to get over there were seven astronauts on board the shuttle and miss o'keefe said that this time i'm quoting now we have no indication that this was caused by anyone or anything on the ground he said an investigative team will be chaired by someone outside the government immediately he's coordinating with the new office of homeland security to secure the debris sites and director o'keefe said the loss of this valiant crew is something we will never get over we trust the nation's prayers will be with them and their families well as we've had at several times today this is a particularly solid moment because

[03:56:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14160s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14160s)

because while we've known for some hours that it's gone the shuttle and that those aborted could not have and did not survive there's something of finality when the director of nasa comes out and confirms what we first knew really in our hearts when we first heard that the shuttle had crashed from that tremendous height and then what we first knew all over again pure pardon that syntax when the word of an unidentified u.s but high government official said it's gone the shuttle and that there were no survivors this may be as appropriate a moment as any as we think about what we have heard from this nasa news conference as we've seen the pictures of the space shuttles that came down to earth which no doubt will be they now go into our national

archive if you will into the museum of our minds as was the case with the explosion of the challenger shuttle as was the case of the burned capsule experimenting back in the 60s with the zero apollo crew these images now become part of our national history part of our national memory and as we watch the crew as it excitedly and with understandable pride and excitement boarded the spacecraft and then look upon the faces of these young people who died in service of their country maybe as good a time as any and i will paraphrase a poem that theodore o'hara wrote a long time ago pieces of it are inscribed above arlington national cemetery in washington d.c the muffled drum said rolled his beat

[03:58:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14281s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14281s)

the astronaut's last tattoo no more in life's parades you meet that brave and fallen view on fame's eternal camping ground their silent tents are spread and glory guards with solemn round this bib whack of the dead we put on our screen as we have before the faces of these not only brave but tremendously accomplished young americans plus the one israeli who was aboard as part of nasa's ongoing program of bringing in the nationals of other countries many have been on these previous flights the flag at the white house at half staff what remains now is for the nation to mourn to express its respect its condolences respect for the astronauts condolences to their families for the investigation to begin bill harvard has reported from florida his sources have told him that in the very early stages they're they're looking and thinking very carefully about the left wing of the shuttle not to say that that's what caused the crash not to say that anything was wrong on that left wing however it is to report as a fact that in the early going the best experts nasa has they're sort of looking carefully at that left wing as a possible part of the puzzle as it was described in the nasa news conference russ mitchell i hope that you and others will forgive the necessary personal reference but i was at rice stadium in houston in 1962 when president kennedy

[04:00:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14402s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14402s)

in 1962 when president kennedy committed the nation to put a man on the moon that at that time he's dedicating the nation and its resources to man exploration of space and dedicated the relation to to reach the moon which we did in early 1969 and you know harp back to that time it was an exciting time in the history of the nation exciting time in the history of space flight but we knew then that it was going to be you know it would consume our lifetime in the lifetime of our children and their children this exploration of space and i thought that sean o'keefe at the news conference the director he and they were eloquent in describing what these young people knew they were doing that is they were pushing the envelope to use the cliché phrase i suppose pushing further and further man's exploration into space and were so dedicated to it my father worked at mcdonald douglas so the old macdonald douglas which helped build many of the apollo and gemini spacecraft so i too have had this emotional attachment to the space program i can remember july 20th 1969 sitting in the basement seeing neil armstrong on the moon and days like this are sad for a lot of reasons for me personally and for many americans but i think about those days and the pride my dad had in the space program and what he helped contribute to it and i think about him today and all the folks who have done that over the years it's very sad there is new video in of uh the debris now this video was shot by jeff foreman an engineer with a degree in physics uh he was out of waco texas and uh i believe you're on the phone with us are you not jeff yeah well describe for us what we're seeing here

[04:02:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14520s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14520s)

seeing here this is the view over uh central texas as we saw it this morning we picked it up as a single vehicle and then obviously you see on the screen now it is broken up into several parts well this is from another angle if you will earlier we had the video which showed the spacecraft coming down if you will from upper right to left on the screen which indicates to me that the person who took that video was somewhat to the north and east you're in central texas and you were in effect right looking north and slightly east were you uh right we picked up in our northwest um i believe that other video you have is probably shot from around the dallas fort worth area we're farther south of there and the shuttle probably came about between us so while the overview was looking south mine is looking back toward the north so it's a lot eliminated differently

from the sunlight and it's a different perspective altogether well since this is new jeff foreman i hope that uh the people with whom you're working there can re-rack it so we can have another look at it and perhaps in the control room what we can eventually do is put together the the previous best amateur photograph we have of the position somewhere in north texas now this was taken in central texas no i'm sorry this was the one taken from north texas this is what we've had before amateur video taken in north texas i'm not going to narrate much over it what can you say you could see the long stream of smoke that came down now we're going to show you the amateur video taken in the central part of the state around waco by jeff foreman and his wife julie

[04:04:13 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14653s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14653s)

i believe still on the telephone with us is colonel mark brown who flew the shuttle columbia some years ago if you're still with us there in dayton ohio colonel brown did you see this new video yes it did can you put it in context for us uh well that's a tall order to start with the perspective that we have here is very much the same as nasa and everybody else does trying to understand exactly what this chain of events is in one of the views it appears that a large white panel is tumbling behind the orbiter and then some seconds after that there's a plume that would indicate either the ignition of some kind of fluid on the vehicle or an explosion and then the breakup follows that just like nasa we'll all be looking at these different views i'm sure for the next number of days trying to put together in our own minds what that exact sequence of events is and colonel brian what do you make of the early reports and we've confirmed these reports that in the very early stages just you know happening today that uh the nasa experts engineers and others sort of concentrating for the moment on on the left wing of the space capsule well i shouldn't call it space capsule of the spacecraft right um two things first of all we need to keep in mind that all the data has been impounded by nasa and for good reason so where they may know a lot more than we do we're relegated to being in a speculation mode secondly they're they literally are going through exactly the same process trying to match the system's telemetry and the behavior of the vehicle with the visual information they're getting from all the different video that's being collect by professionals and amateurs around the country

[04:06:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14761s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14761s)

and amateurs around the country and ultimately they will try to piece that together with the structural evidence physical evidence that's on the ground to find out absolutely what the cause of the accident was also i guess i would like to give a great tribute to a lot of the eyewitness accounts that we have had so far there have been some reports of people who have said they heard explosions in the sky we now know that of course it is quite normal for the shuttle to make a double sonic boom when it passes overhead the eyewitnesses reported hearing multiple independent sonic booms of course is quite correct the vehicle at the time that appears to have broken up was going somewhere in the neighborhood of mach 15 mach 18 depending on timing here and it would indeed cause multiple sonic booms and the sonic boom is from the speed of the individual pieces of debris moving through the atmosphere and not the sound of an explosion occurring up at that altitude secondly this cannot be emphasized enough anybody that sees any debris coming down and landing should not touch it they should obviously clearly mark it and notify the authorities so that can be dealt with in a professional way a lot of the chemicals on the orbiter are very toxic and certainly are a threat to life if handled improperly brown we appreciate your insight it's extremely valuable to us and i appreciate you being with us today we'll switch quickly to bob orr our cbs news aviation uh coverage man in washington who has some new information bob dan first i just want to make a quick comment about that video we just saw very early in that sequence we see something that could be very very telling and you touched on it there when you were talking to the commander a large piece or it appears to be a large piece separates before we see the first sign of any kind of explosion or fire that could be significant because if we're talking about a structural failure some kind of big structural breakup of the columbia spacecraft that could be

[04:08:03 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14883s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=14883s)

of the columbia spacecraft that could be uh indicated here by right there we see something that starts to come off right there and as we see that's followed then by uh other obvious fire and explosion type pictures but that could catch the sun as it comes down that large piece if it's a big flat surface and could give the image of it being on fire so we don't want to go too far out here but that could be and i emphasize could be a sign of some type of breakup bill harwood says as we've reported that sources tell him that the telemetry data stream that is the real-time information coming from colombia may indicate there was a problem in that left wing a senior administration official told me a short time ago he would not confirm that report but he did say a short time ago that they are investigating a quote systems failure i don't know what systems failure means but obviously that could be code for some type of major mechanical problem beyond that the administration's made a curious choice here in asking or directing rather fema the federal emergency management agency to head the investigation the early idea was nasa would probably do that in cooperation with the ntsb but now fema the folks that normally respond to hurricanes tornadoes natural disasters will be the lead agency and beyond that we're told that northcom that's the new military command will be there to assist and a cavalry division from fort hood is going to be dispatched to help with search and rescue and help secure debris fields it's a huge challenge because as the radar data has shown and as these video images have shown what is left of colombia is probably scattered over several hundred square miles this in effect if it were a crime would be a crime scene it is an investigation scene and all of this could be critically important to figuring out what exactly went wrong first responders are out right now trying to secure the evidence best they can they apparently will get some help from the army as fema moves forward to try to put all of this back together dan well bob one wouldn't want to make too much of this but

[04:10:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15001s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15001s)

too much of this but it's going to strike a lot of people is passing world strange that fema of all the government agencies which is as good as it can be and has been is not noted to having physicists and engineers and aeronautical experts fema why fema well i think this is my opinion that this is a first run for the homeland security i'm sorry dan i'm getting a little echo there i believe that this is the first run out of the box for the new homeland security department in an attempt to mount a coordinated response now while fema will be at the point of the spear so to speak right behind fema will be all of the technical expertise of nasa and from the ntsb so i think the folks at fema so used to responding to natural disasters we had all the technical assistance they need but this is a message and i think we shouldn't mistake it from the bush administration that this will be a very centrally controlled investigation the new secretary of homeland security tom ridge will be directing it and fema will be his first responder dan bob orr we're going to bring you up to date on what's happened as we pass the top of the hour for those of you who haven't been with us right the way through but let's just say for the moment the headlines of the hour are the shuttle columbia is gone destroyed as it plunged to earth this morning over north texas no survivors among the astronaut crew of seven cause unknown and investigation has been launched we have with us now we're honored to have him the israeli ambassador the united nations uh the honorable dan gilleman mr ambassador thank you for being with us thank you our condolences uh to the family of ilian ramon thank you and to those in in your country for their loss two free countries exploring the high frontier for the sake of humanity in a special time of the intifada it must have been a period of special pride for israel to have an israeli aboard this

[04:12:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15121s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15121s)

for israel to have an israeli aboard this spacecraft it was indeed first let me express my very deep condolences on behalf of my country to the american families of the other six astronauts as you say this is a very very tragic day for all of us because this mission was a celebration of the partnership between our two countries celebration of the bravery and the freedom and the exploration and the spirit of our two countries and it was something very positive something beautiful in the midst of a very ugly situation a very horrible situation in our country and as a result of that elon became very much a national hero because when you see the pictures of the intifada and you've been there and you see bodies strewn and children dying all of a sudden in the midst of all that there comes this very beautiful person the person who has exhibited bravery and courage throughout his life who was an air force pilot who participated in some of the most daring missions

of the israeli air force who took part in bombing the nuclear reactor in iraq that bombing in 81 by the way was condemned by most of the world i think in retrospect today when people look at what is happening in iraq they will probably commend and upload that and then he joins with his american friends in exploring outer space for the benefit of humanity there is something positive coming out of all this something which brought a lot of pride a lot of exhilaration to the israeli people who looked up to him as a hero as someone who embodied everything that was good in israel and this partnership between our two countries this bond beta between our two countries was something very important to all of us because it showed that between i mean beyond strategic cooperation beyond military cooperation there is cooperation in good causes and the fact that it has come to such a tragic end is is devastating and i must tell you that in israel the personal sorrow and grief uh for the

04:14:00 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15240s>)

personal sorrow and grief uh for the family of elena ramon his wife and four children and for the families of his american colleagues is mixed with great national sorrow you know my son is an officer in the israeli air force in a unit which specializes actually in rescuing pilots who operate behind enemy lines and maybe because of that i can sympathize with what has happened even more but beyond the personal angle this is a destruction and a very tragic end to one of the most beautiful manifestations of cooperation and of partnership between the two most beautiful countries in the world great america and small israel two great democracies who in excellence and in curiosity and in very much bravery and spirit of freedom when to explore outer space and uh the fact that it has ended like that is is very very very tragic i you know we we want to project from our country uh all the good that we have and and we're doing it in partnership with the u.s i can tell you that only a week ago i was at lincoln center and i was standing it was a few days after presenting my credentials while the new york philharmonic and israeli philharmonic both on the same stage 200 of them were playing the american national anthem and the israeli national anthem i felt a lot of pride i had goose pimples i had tears in my eyes because i felt that that was a very great moment of cultural getting together now what elon and his friends tried to do what the us and israel tried to do together went beyond that not only geographically because it was in outer space but it went beyond all the borders we knew it was breaking them for the good of humanity and you know i spoke to the prime minister to ariel sharon last night he was awaiting elon's return with great anticipation i spoke to many friends in israel today and they were crying on the phone it was such a tragedy and again that

04:16:00 (<https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15360s>)

it was such a tragedy and again that mixture of the personal tragedy of the family of the children of this son of holocaust survivors which which is another thing i think that elon embodied everything that was good in israel but beyond that he took with him to space as you know a drawing of a 10 year old boy who perished in auschwitz he drew it in teresa started the concentration camp of the razenstadt took it with him to auschwitz and perished there that that drawing came to the holocaust museum in jerusalem and elon is a sign that at the end of the day good prevails over evil that the israeli people after two generations have come from being slaughtered in the concentration camps to exploring outer space with our american friends this was a statement which was larger than life and that makes this tragedy larger than life literally reaching for the stars reaching for the stars and achieving the israeli dream and the american dream and this dream turning into such a nightmare today one wants to keep in mind mr ambassador i know you do have it in mind that the program of taking aboard the space shuttle uh nationals from other countries i did didn't begin and will not end with taking a board of an israeli astronaut i know it was a saudi astronaut before and the reason i mentioned it because in in the looming war with iraq the reality of what's been happening on the ground in your country and with the palestinians there is the risk that there will be people who try to take advantage of this for their own ideological or partisan political advantage of saying ah you see they had an israeli aboard this spaceship it was just to take a moment to point out that the program was designed to have as many people any qualified people from as many nationalities to take space flight as possible and that's how elon ramon

[04:18:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15480s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15480s)

as possible and that's how elon musk got aboard the space shuttle that's right [Music] as you said there were many nationals for israel this was a first i hope that nobody is going to be cynical enough or cruel enough to use this in any negative way this was a wonderful example and demonstration of partnership between two great countries and i hope very much that we will soon see another israeli astronaut go up there with his american friends overcome the difficulties and demonstrate to the whole world that the spirit the curiosity the excellence the freedom-loving spirit of both our countries will prevail even after this tragedy and even after all the other events which may take place in the future mr ambassador thank you for being with me thank you very much for having me and my condolences thank you thank you thank you let's go now to john roberts our chief white house correspondent john dan president bush is scheduled to address the nation in about two minutes time from the cabinet room he arrived back here shortly after 12 noon he's been huddled with his chief of staff andrew card his communications people and his speech writing team led by michael gerson who crafted the majority of the state of the union address he's been putting together some words of comfort for the nation and to express his thoughts and appreciation for the heroes who died on board the space shuttle columbia we're we're told that this is going to happen at two o'clock eastern but the preparations were hurriedly put together it may slide just a little bit but they're trying to get it as close to two o'clock as they can we can also tell you dan that the federal emergency management agency has been designated as the lead agency for uh debris and search uh they are going to be charged with uh securing and recovering the parts of the space shuttle they have a satellite office that's set up in denton texas the acting under secretary for emergency preparedness and response michael brown is in touch with the governor of texas rick perry and governors of other states surrounding the area where the debris field is to find out what they need and how fema will respond

[04:20:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15600s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15600s)

fema will respond it's not clear at this point if mr brown will be going to texas himself and or joe alba who resigned as a fema director but is still on as acting fema director until march will go down as well so the president expected in uh in the next couple of minutes here dan we'll keep watching that for you reporting live from the white house at the top of the hour i want to recap now for those of you who may have just joined us or those of you who have joined us in progress or went away from the television set and coming back just a short time ago nasa announced officially and finally the space shuttle columbia was destroyed and said it quote does not appear there any survivors among the seven astronauts nasa administrator sean o'keefe says it is a sad day for the astronauts families and for the nation o'keefe said there's no indication whatsoever that this was caused by anything or anyone on the ground and for that matter any bomb aboard the spacecraft itself he did not say that directly that was the clear inference and the director of nasa said that the loss of and i quote now this valiant crew is something they will never be able to get over the families of the astronauts and for that matter the nation is a whole mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida cbs news has among other things two very clear amateur photographer shots one taken from north texas up around dallas the other from the central part of the state in waco this is the shot from waco that you're watching now cbs news space consultant bill harwood says sources tell him that the problem and i quote could very important word a direct quote could have been some massive structural failure in the shuttle's left wing at the very least we can report as a fact that in the early going the nasa investigators are sort of concentrating

[04:22:03 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15723s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15723s)

investigators are sort of concentrating they have their focus on the left wing let's point out that we're in the very early stages of a long investigation and may in the final analysis be important or unimportant that in the early stages they're sort of concentrating on the left wing of the shuttle there are reports that debris has been found in five states now including a lot of debris in southeast texas and the piney woods country in and around nacogdoches and corsicana president bush is expected to address the nation at this hour that is

sometime between two and three o'clock today uh eastern time possibly at three o'clock itself it's not there's no firm schedule for it but of course cbs news will be on the air continuously and we will bring you live coverage of the president's address to the nation when that happens there were seven astronauts aboard the shuttle including six americans along with the first israeli astronaut partly because of his presence the israeli astronaut security surrounding this mission was tight the columbia had been on a two-week science mission which until now had been deemed a success because virtually every experiment worked we take you now to the white house and possibly the president's address what john roberts at the white house well dan we're expecting expecting that the president will be speaking we got the two-minute warning about a minute and a half ago so he uh he should be up very soon of course the president was up at camp david when uh when he uh heard the news it was his chief of staff andrew card who telephoned him this morning to uh to say what had happened uh sean o'keefe the nasa administrator also telephoned the president the president made the decision to come back from camp david he could have given the address from camp david dent but he thought more appropriate that he should come back to the white house and the president about to speak

[04:24:20 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15860s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15860s)

my fellow americans this day has brought terrible news and great sadness to our country at nine o'clock this morning mission control in houston lost contact with our space shuttle columbia a short time later debris was seen falling from the skies above texas the columbia is lost there are no survivors on board was a crew of seven colonel rick husband lieutenant colonel michael anderson commander laurel clark captain david brown commander william mccool dr kulpana javla and ilan ramon a colonel in the israeli air force these men and women assumed great risk in the service to all humanity in an age when space flight has come to seem almost routine it is easy to overlook the dangers of travel by rocket and the difficulties of navigating the fierce outer atmosphere of the earth these astronauts knew the dangers and they faced them willingly knowing they had a high and noble purpose in life because of their courage and daring and idealism we will miss them all the more all americans today are thinking as well of the families of these men and women who have been given this sudden shock and grief you're not alone our entire nation

[04:26:02 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15962s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=15962s)

you're not alone our entire nation grieves with you and those you loved will always have the respect and gratitude of this country the cause in which they died will continue mankind has led into the darkness beyond our world by the inspiration of discovery and the longing to understand our journey into space will go on in the skies today we saw destruction and tragedy it's farther than we can see there's comfort and hope in the words of the prophet isaiah lift your eyes and look to the heavens who created all these he who brings out the story hosts one by one and calls them each by name because of his great power and mighty strength not one of them is missing the same creator who names the stars also knows the names of the seven souls we mourn today the crew of the shuttle columbia did not return safely to earth yet we can pray that all are safely home may god bless the grieving families and make out may god continue to bless america a moment of silence after president george w bush has addressed the nation and now dan rather with rush mitchell back at cbs news world headquarters in new york a transcript of the final radio transmission between mission control and

[04:28:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16081s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16081s)

transmission between mission control and space shuttle columbia shortly before 9 a.m eastern standard time keep in mind that the shuttle it's believed the best time frame we have is just shortly after 9 00 am eastern standard time this morning it began to break up for whatever reason this transcript of the final radio transmission the final radio transmission apparently came just before 9am and i quote mission control quote columbia houston we see your tire pressure messages and we do not copy your last columbia roger uh transmission breaks off after the crew member starts to say a word beginning with the sound ba buh columbia houston we see your tire pressure messages and we do not copy your last columbia roger last

transmission recapping quickly now for those of you who may have just joined us and just keep you up to date on tomorrow's headlines president bush has just spoken about the loss of the space shuttle columbia and the seven-member crew he said the astronauts assumed great risk in the name of humanity and that the cause in which they died will continue nasa says the orbiter was destroyed and it quote does not appear unquote that there are any survivors nasa administrator sean o'keefe says it's a sad day for the astronauts families and for the nation john o'keefe said there's no indication that this was caused by anything or anyone on the ground no indication anywhere of obama board he said that the loss of this and i quote valiant crew is something the families and the nation will never be able to get over mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida it was over north texas headed to land just a few minutes later at the tremendous speed

[04:30:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16200s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16200s)

tremendous speed which he was traveling it would have taken only a few minutes to get there cbs news has amateur video quite a lot of it we're showing you two of the scenes that we have this one taken from central texas at waco texas we have another taken from north texas both of which are explicit in their detail of what happened to the shuttle cbs news space consultant bill harwood says sources tell him that the problem could that's a quote could and italicized it could have been some massive structural failure in the shuttle's left wing at the very least it is a fact that in the initial very initial stages of the investigation that some concentration on what may have happened with the left wing there are reports that debris has been found in five states you're looking at some of it now a lot of debris over southeast texas and around nacogdoches incarcerated there were seven astronauts aboard including six americans along with the first israeli astronaut and partly because of the israeli astronaut's presence security surrounding the mission had been tight for takeoff and at times when the shuttle was at lower altitudes this morning it was a tremendously high altitude 200 000 feet plus uh and is being emphasized that no weapon from the ground that could have been in the hands of terrorists or others of could have reached it at that height the colombia had been on a two-week science mission which until today had been deemed a success because virtually every experiment worked and the orbiter was at an altitude of 200 000 feet plus it was traveling at 12 500 miles an hour when contact was lost and these amateur photographs began to be taken russ mitchell the initial hope as we sat here at nine o'clock this morning eastern time we first heard that mission control had lost contact with the shuttle was that this was just an intermittent thing that intermittent thing that this would contact would be established very

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contact would be established very shortly which we understand is not uncommon when the shuttle comes in to the atmosphere however when we talked to bill harwood at about i guess about 9 14 eastern time the the shuttle was scheduled to land at 9 16. it was clear that something was wrong after 14 15 minutes of hearing no contact from the shuttle and at that point mission control came on and said we need to go into emergency procedures we need to go into our contingency plan because something is definitely wrong and bill harwood told us very early there is no way for the shuttle when it's coming down it's basically gliding it's it's a floating brick as bill harwood said at that point we knew that something was wrong something tragic and unfortunately it has now been officially declared and we move on indeed we do but not before contemplating the words of the late president john f kennedy when he committed the united states to reaching the moon he did it in the early 1960s it was achieved in 1969 quote president john f kennedy in 1962 as he committed the united states to reaching the moon and to be the first to reach the moon quote the united states was not built by those who waited and rested and wished to look behind them this country was conquered by those who moved forward and so will space be conquered dateline baghdad immediate popular reaction in baghdad the iraqi capital today to the loss of the u.s space shuttle colombia and seven member crew including the first israeli in space was that it was and i quote now the reuters news agency the summer iraqis on the street saying it was quote god's retribution on americans a government employee is quoted as saying we're happy that he broke up another government employees quoted saying god wants to show that his might is greater than the americans they have encroached in our country god

[04:34:01 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16441s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=16441s)

they have encroached in our country god is avenging us and so forth that among the reaction with the iraqis where of course feelings run very strong with and what they believe to be an almost certain war uh at their doorsteps uh a number of quotes coming out of baghdad along that line for whatever if anything they may be worth the iraqis will no doubt find some kind of significance in the fact that the shuttle colombia broke up over texas president bush's home state and for those of us in iraq who choose to think that well we would say no more that is right bill harwood is at the kennedy space center in florida we talk about this notion of moving on let's talk about the possible future of the space program bill what sorts of hurdles do you think nasa will have to deal with now that say it didn't have to deal with 24 hours ago well obviously losing one quarter of our nation's manned space flight capability is a major blow no matter how you look at it uh and again we got to keep in mind obviously the crew is the is the real loss here but we're talking about the hardware now i want to keep that separate it's a huge blow columbia is a heavy orbiter it was the first one they ever built flew for the first time back on april 12 1981 was just two people on board it's so heavy it cannot routinely go to the space station and of course as you know russ the space station is nasa's big ticket item right now there's three astronauts up there as we speak that rely on space shuttle transportation to keep the station supplied and to continue its assembly this was one of the final two missions on nasa's entire shuttle manifest or launch schedule that does not go to the international space station the only other flight on the books right now that doesn't go to the station is a 2004 mission to service the hubble space telescope so all of nasa's flights for all practical purposes or to the station and colombia was going to start making some of those flights to help ferry up new crews this coming november the first such flight was scheduled it was going to carry a new crew up to the space station along with more hardware

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space station along with more hardware to build it and of course the first educator astronaut barbara morgan who as you know was krista mcauliffe's backup back during the challenger program she hung in there all these years finally was named an actual astronaut and was waiting to to fly in november aboard columbia to become the first teacher in space to fulfill krista mcauliffe's legacy if you will and it's it's just striking this morning she was here at the space center here to be on the runway she was flying approaches with the chief astronaut in the shuttle training jet waiting for columbia's arrival and of course her dream obviously has been severely affected it's just it's a sad day for everyone i think nasa can recover russ i don't think this was the kind of of a failure that that knocked nasa during the challenger accident where you had an ongoing problem with those boosters that had been covered up nasa's focus on safety since challenger i think is unchallenged and i believe this this was obviously a random failure sometimes i say obvious i don't see any hidden thing that's been lurking in the program not getting addressed for whatever reason i do believe that their emphasis on safety is genuine and i believe they'll get to the bottom of it and go on as the president said i don't think it will take three years to get over this i believe the telemetry will show it to them eventually but it's going to take some time well harvard we want to come back to you in just a moment keeping in mind that president bush in his address to the nation said that colombia is lost there are no survivors and the president said and i quote the creator who made the stars knows the names of the seven souls lost today but picking up on something unquote president bush pick up something that you touched on bill about the future of the program and an answer to russ's questions i want to bring in john logsdon who's director of the space policy institute at george washington university thanks for being with us uh datelined out of moscow is a quote uh from a ranking russian space authority who says and i quote it's absolutely obvious that shuttle flights will be stopped possibly for some years until the final

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possibly for some years until the final determination of the cause of the columbia's accident does that mesh with your thinking at this time no not at all i'm much more close to what bill harwood just said that this does not seem to be some systemic problem with the shuttle uh my total speculation is that that we will be flying maybe within a year uh there pressures first to get it understood and fixed whatever happened but then with

the international space station up there with the assembly needing to proceed i think we're going to with prudence resume shuttle flights in in in the foreseeable future well you said possibly in a year i know that this early stage is hard to say but you think it might take a year now i want to underscore for our viewers if it's true and i'm double checking with you that the astronauts who are in the space station now those three astronauts they have a way down with the soyuz space capsule if a determination is made not to send the shuttle back up to get them in early march as is now the plan yeah that's that's very correct it really validates the uh the absolute necessity of having a lifeboat on the station it's for precisely these sort of situations where the crew always has a way home there is a three-person capsule russian soyuz capsule is attached to the station and they could leave the station in any emergency or with forethought in a case like this if if we decide to to mothball the station while we get the shuttle flying again because the next cruise doesn't make any sense to put them up there until we can bring the big pieces that were going to be assembled over the next four or five missions up to up to the station so sure there's going to have to be some very fairly broad gauge rethinking of the planning for the program but the program will go forward well thinking about those three

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well thinking about those three astronauts up in the international space station and the prospect the possibility let's say that they'll have to take this soyuz russian-made vehicle down from up there you tell me but that sounds like pretty risky business you get aboard that small russian built thing who knows who built it what conditions it's in take that thing all the way down down to earth i don't want to be naive but on the other hand as i say from the outside looking in that gets your heart rate up well i think that's a bit too alarmist these capsules are being brought up on a six-month rotation basis i don't know exactly how long this capsule has been there it's the same capsule that has been used to bring cosmonauts and and people have flown on the russian program back from space since the late 1960s so this is a well-known well-proven piece of hardware it's not comfortable it's not something you want to spend much time in but it works it has worked over and over again so i don't think that that that should raise much levels of nervousness and and the crew is all trained uh on this system all anybody that flies on the station spends some time in russia training on the russian system so that this is very familiar hardware to them and i know that uh you would agree we want to emphasize that we're a long way from making a decision of how those astronauts who are at the space system come down for all we know they may they may come down by shuttle yet although as you point out it's going to take a while for this investigation so we'll just have to see how all that develops indeed thank you very much for being with us we're going to go to father thomas mcshane who is professor of physics at creighton university in omaha nebraska he taught astronaut mike anderson and and stayed in touch after the later astronaut his student was in the astronaut program thank you very much for being with us father what can you tell us about mike anderson mike anderson is uh was my student

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mike anderson is uh was my student in the late 80s and he was a very easygoing fun to be with type of guy who didn't seem like he was taking things super seriously but i think he always was and he had a good sense of humor and he gave the impression of being a very uh cool type of person well father thomas when when the when he was there at the university at creighton university what kind of student was he how did you find him as a person you know what we're reaching for here is in this moment of the death of heroes to bring the human touch to their fellow americans knowing who they were and what kind of people they were as i say he uh he was a type of person who was easy to get along with and very personable and he did not uh it wasn't a show-off and he was had very responsible duties as a pilot of an airborne command post while he had stationed an officer off an air force base while he was in omaha and he decided on his own to work on a master's degree and in physics and he kept that ball in the air while he was taking turns piloting the air force airborne command post so he was a somewhat intense type of person but he kept it very well disguised he didn't as i say he wasn't a showoff and he to like to flaunt his capabilities we're speaking of lieutenant colonel michael anderson lieutenant colonel in the united states air force this was his second flight father mcshane i can't resist asking you as a teacher of

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resist asking you as a teacher of physics at creighton university did you notice lately the news item that said that the united states of america is now turning out more college majors in physical education in pe than it is in physics and mathematics combined not so good we need both but we particularly need well-trained people in science and i don't know how to explain this the phenomenon father thomas mcshane at creighton university friend and teacher of lieutenant colonel michael anderson thank you for being with us i want to go to dr ed crowley of mit who's been with us throughout the day from the studios of our station wbz in boston uh dr crowley what did you make of today's official news conference by sean the director of nasa and the others what'd you make of it well uh dan in uh administrator o'keefe's comments there was an interesting hint of what will play out in the next few days and weeks where as i spoke with you earlier i mentioned that there were two options one that there could be a an essentially an internal nasa investigation and the other is that there would be a presidential level appointment of a an external panel sean o'keefe is someone in whom the white house has a great deal of confidence he was the comptroller of the dod and secretary of the navy under cheney when cheney was the secretary of defense he was a deputy at omb and he's someone who is a firm management leader at nasa and i think we see here a very quick decision by the white house to leave this investigation largely in the hands of nasa to coordinate but to bring in external authorities from the air force the ntsb the navy as he mentioned who will actually perform the bulk of the work and so that there's enough arms length relationship between the

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arms length relationship between the investigators and nasa that it will it will in fact be a very thorough and objective investigation but we don't see a trend towards a politically led investigation as we had after challenger dr crowley were you or were you not surprised that fema is being put in charge of the investigation i i think uh i think this is a little early to comment directly on that as i understand the the brief bits of information we have that fema has the direct responsibility for securing the uh the artifacts which have unfortunately fallen from the sky in in the south and we will have to see as the events play out in the next day or two whether in fact fema is is directly given the primary lead in this but uh it's it's consistent in the fact that it's a an agency with some knowledge and authority of this sort of thing certainly who has the resources to control the ground search and securing uh but at somewhat arm's length from the uh from nasa itself added crowley this is russ mitchell in as we remember the lives of these fallen heroes we have to of course look to the future let me ask you you touched on this a bit earlier where do you see the future of the space program is it going to be tougher for nasa to get funds to get the type of funding that has received in the past well i think in this day of national tragedy the one consolation we have is going back to john logsdon's point that the three astronauts on board the space station are not stranded in fact have as he mentioned a very reliable and robust way to get home in a few months if that's the if that's the decision that's taken uh it should be pointed out that this is a verification of a very critical political decision that was made in 1993 under the clinton administration at which time the orbit in which the space station would be launched was

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space station would be launched was actually changed to the one that was accessible by the russian launch system uh because of that decision and because of the decision to bring the russians into the program the the reliable access the two modes of access to the space station are now assured and it's an event like today's which makes us realize just how important that decision was going forward i think we'll see a closing of ranks behind nasa this is will be seen as a challenge in washington a challenge to our our technical competence there will be almost certainly a call to understand what happened but to move forward and traditionally such challenges have been met in washington by rather than withdrawing of funding an increase in funding to meet the perceived needs dr crowley let me follow up on that there's certainly a lot of talk today and it's sincere well-meaning talk about carrying on uh with the space program president bush said our journey in space will go on but talk's cheap uh space shuttles and other spacecraft uh are very expensive where is the money going to come from with a nation that's uh fighting one war on the brink of another war

going through a series of not tax increases tax cuts it's not a political state we're just laying out the facts when you talk about additional spending for the space program where's the money going to come from well dan that's a political question which i'm not entirely qualified to respond the administration will obviously make a set of decisions of priorities and tasks in the next six months and decide whether it's appropriate to have nasa respond to this within their current budget profile or to seek some sort of augmentation it's unlikely and i think marcia smith mentioned this in her comments it's unlikely that we will build another shuttle the the skills the spare parts the

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the the skills the spare parts the components to do that are simply not in the inventory at this time it's much more likely that what will happen is an accelerated plan to build the thing which was always planned to replace the shuttle and that the the program will be re-scoped using the three spa the three shuttles which are in fact the most capable of going to the space station the three remaining shuttles uh to to support the space station program over the next uh next decade along with the potential european assets and the russian assets well picking up on that let's go to bob orr our ivy expert in washington first bob uh crowley mentions well he doubts this is his opinion but you know a better authority about aeronautics it probably doesn't exist in this country he doubts they'll build another shuttle be built said we'll go on to build the next thing what is the next thing well it's a good question dan i think that there will be a lot of political considerations that have to play out here of course you know the space program is a matter of great national pride it's not easy just to put that on the shelf there was a lot of criticism of course as you remember after 1986 of the challenger accident saying maybe we're going too far too fast that faded as success upon success was built there were 88 successful shuttle flights after challenger until today i think it's an open question it's probably way too early to speculate the important thing here at least in the next couple of days is for investigators to try to get a handle as to what went wrong if this is a quirky systems failure what they call in the investigation business a one-off that is it's a one-time failure that's not systemic in any way if that's the case then there will be a great cry for continuing perhaps the shuttle program or the next generation program whatever that is if there's something that's more insidious and more across the board then that could be a yellow caution sign

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then that could be a yellow caution sign the preliminary data bill harwood's been talking about the telemetry data from columbia seems to be pointing towards a problem on the left side of that spacecraft perhaps a problem in the left wing a senior government official told me that the data shows without any question a systems failure a major systems failure in the video this is somewhat speculative but the video seems to show something large coming off that spacecraft just before we see those streams of fire and vapor this is the video i'm talking about right here if you look very carefully there's an initial right there something that comes off and then that's followed by obviously the breakup remember that picture is of an object moving about 18 times the speed of sound 200 000 feet above the earth yet it's still visible whatever broke off is visible that suggests it could be a very very large component part that video evidence coupled with obviously the debris recovery and whatever the forensic evidence from the debris recovery reveals could answer the ultimate question was this a one-time freaky event an unfortunate tragedy that could not have been foreseen could not have been prevented or is this uh suggestive of something systemic and frankly dan i don't think anyone now even the best minds have the answer dan bob reporting live from washington our aviation export here's a short run of what nasa administrator sean o'keefe said about an hour or so ago this is indeed a tragic day for the nasa family for the families of the astronauts who flew on sts-107 and likewise tragic for the nation thereafter we have met with the family members of the astronauts who uh were here at kennedy space center and are soon to be departing to back to johnston to houston the president has called and spoken to them to express

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them to express our deepest national regrets we have assured them that we will begin the process immediately to recover their loved ones and understand the cause of this tragedy at this time we have no indication that the mishap was caused by anything or anyone on the ground here this morning with the families of the astronauts and their friends it started out as a pretty happy morning awaiting the landing of sts-107 and we had highly anticipated their return because we couldn't wait to congratulate them for their extraordinary performance and their excellent efforts on the science mission on this very important flight they dedicated their lives to pushing scientific challenges for all of us here on earth and they dedicated themselves to that objective and did it with a happy heart willingly and with great enthusiasm the loss of this valiant crew is something we will never be able to get over and certainly the families of all them we have assured we will do everything everything we can possibly do to guarantee that they work their way through this horrific tragedy we ask the members of the media to honor that too to please respect their privacy and please understand the tragedy that they are going through at this time we will help the media assure that be the case as well we trust the prayers of the nation will be with them and with their families and again a more courageous group of people you could not have hoped to know than the families of these crew

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to know than the families of these crew members an extraordinary extraordinary group of astronauts who gave their lives and did it in a way that they knew exactly the risk but never and ever do we ever want to see a circumstance where something like this could ever happen and we diligently dedicate ourselves every single day to assuring these things don't occur and when they do we have to act responsibly accountably and that's exactly what we will do nasa director sean o'keefe just a short while ago an hour or so ago we have on the telephone now an american hero an icon apollo 13 astronaut who walked on the moon jim lovell is on the phone from marietta georgia jim thanks so much for being with us give us your thoughts and some perspective on this national tragedy well dan it is certainly a tragedy and from the apollo 13 crew our thoughts and our prayers are off to the families of those gallant people that were on board 107. every once in a while of course things go and we and we don't know exactly what happened and it's probably going to be a little difficult to determine uh the cause of this one coming back in from orbit so it's going to take some time to to analyze it but we must remember that we do have a space station and astronauts manning that station so we're going to have to service that station somehow jim lovell it's the rare american who doesn't know the story of apollo 13 and the crisis that occurred aboard that flight as you were heading back toward earth give our viewers and listeners some sense of what it's like to be in a spacecraft as you go through re-entry now set aside the it's a big set aside the very special problems that you and your crew had that as you re-enter the earth's atmosphere and

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re-enter the earth's atmosphere and literally head toward home what is an astronaut thinking what are they doing well on a normal flight they are pretty uh secure and they i think they have a lot of confidence in the vehicle that they're flying in coming back you have to remember that on 13 we had four days to think about what went wrong and how do we get back home and the last thing that we were afraid of was that the explosion had damaged our heat shield which would have caused a a a tragedy on 13. both the challenger and the colombia now these are accidents that occurred suddenly in i guess the atmosphere at least columbia was just beginning in the atmosphere so these are tragic moments and uh you know ones that you don't you don't see coming on 13 you know we we knew that we had problems all the way along the line and we are prepared to try to do everything to get back but the crews on on columbia and the cruise on challenger suddenly they were confronted with an almost catastrophic situation jim lovell thank you very much for taking time to talk with us we've been talking on the phone from time to time to former astronaut colonel mark brown he's now in the studio of our station whio in dayton ohio colonel brown is good to be able to talk with you over the television now rather than just the telephone you've been watching and listening and i know that you've absorbed the two among many amateur videos we have of the christ today has anything else occurred to you that we should be thinking during this period excellent questions like everybody else

we're trying to understand exactly what the sequence of events is here it appears to me and of course this is purely speculation that a panel of some types separated from the vehicle and within a few seconds after that there's the appearance of small explosions in the aft end of the orbiter that resulted to break up the vehicle

[05:00:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18000s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18000s)

that resulted to break up the vehicle purely speculation there are multiple studies that will have to be done before we find out exactly what in fact happened the video that we're looking at now is a good example if you watch closely you can see the detailed breakup there if you back up even farther in the sequence you'll see that there's one single panel that is visible behind the orbiter tumbling and also of significance is the panel itself is lightly colored apparently on the top and the bottom which indicates they came from the top half of the orbiter not the bottom of the orbiter where the thermal protection system is black now as to what actually caused the panel to structurally separate from the vehicle i have no clue and i doubt that anybody else does at this point where the vehicle is instrumented to report back what they call telemetry on the systems that are on the vehicle itself there is very little instrumentation on structure and normally as in the case of an aircraft accident you would need to recover that piece of structural material to determine what actually caused the failure that is going to be extremely difficult in this case because the failure occurred at 200 000 feet at a speed in excess of mach 15 where the orbiter was subjected to about 1800 degrees in temperature so nasa has a great challenge ahead and like everybody else all we can do is stand by and hope that this unfolds in a in a good way colonel as a reporter not as a certainly not as a space expert not even as someone is all that knowledgeable about the space program although like a lot of americans i have long been a space buff something sticks out in my mind and i want to ask you to put it in perspective for me and that is not long after launch just before but in the general neighborhood of when the fuel tanks so necessary for the great thrust and launch we're about to peel away

[05:02:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18120s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18120s)

launch we're about to peel away we know that a piece of installation how large it was we don't know a piece of installation got loose and there was a report that it possibly underscore the word had hit the left wing of the spacecraft and it's somebody in nasa somebody pretty high up as a matter of fact uh remarked at the time well that's something you need to follow up and and follow through on now stay with me if you will today bill harwood is reporting from very reliable sources that in the very first wedge of the investigation that they are centering on the left wing of the spacecraft and that's the wing in which the question was raised about this insulation and my question to you is is this is it wrong to put some emphasis on that far too early to do so give us some perspective on that well that's a great question and a multi-faceted one the first thing to remember is that nasa has impounded all the real telemetry the real information that describes what the vehicles was subjected to and experienced at the time that it broke up as part of the overall investigation process i guess it's important we kind of go through what we can expect to occur from here as we've already heard from administrator o'keeffe and and bill reedy the tiger team is being formed nasa is literally going to battle stations to figure out what happened now that process is very complicated it will include not only a v very detailed assessment of what happened right up until the moment that the failure occurred and thereafter but also going back through all of the records on the crew the payloads the processing of the vehicle all the fluids even experiences that the vehicle was subjected to on prior flights to see if it can find that the initial piece of the trail that led up to the ultimate failure so they have a very daunting task ahead of them that's going to take them a long time to unravel

[05:04:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18240s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=18240s)

time to unravel brown thanks again for being with us i'm sorry i didn't mean to step on that last sentence you're more than welcome thank you very much colonel in our dallas bureau of cbs news is raymond cervantes an eyewitness who shot some video of the breakup of the shuttle columbia now this is video we have not seen before uh thank you for being with us mr cervantes uh do you have the video there can we see it uh whether that's true or not what did you see when did you see it good afternoon dan it was an

unbelievable sight actually i'm a hobbyist that actually enjoys videotaping the shuttle as it re-enters the atmosphere sometimes you'll get a nice plume of the of the shuttle as it comes in and over the horizon it makes it for a beautiful sight but this one is uh was a little different this time i did notice that it looked like tiles or something coming off the shuttle my wife remarked to me what is that looks like it was a chase plane or something but at that altitude it's 200 000 feet going 17 times the speed of sound um it only could be the shuttle and it was a very tragic it looked like um unbelievable fireball at the end of it and i did notice that there was a couple of explosions as it was coming in and doing the re-entry well i want to re-rack this video now we we have among the many pieces of video we have we have three that we think are particularly regulatory there is one that was taken earlier in the dallas fort worth area then there was one taken in waco which is in central texas and now mr cervantes uh yours was taken in dallas was it actually in fort worth in the dallas fort worth area and they are all taken at the same time as the shuttle was re-entering it comes from west to east and i did notice watching my website that i usually watch to view the space shuttle as it was coming over time to go outside and view the shuttle and i did notice um the normal reentry as it does make its

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the normal reentry as it does make its nice uh re-entry with the the plasma trail behind it and my wife didn't make the comment to me as i was videotaping that there was debris coming off of the shuttle and you do notice that there are little small explosions as it's coming in you can you will notice that on the video what did you think when you first saw this well it looked like a regular re-entry as it comes in you'll see the the the classic plasma trail as it comes in but then i did see the debris coming off and the national nasa people are professional they're they know what they're doing and it could have just been something just in the atmosphere maybe something an anomaly or something but when i did hear about four minutes later a big boom it rattled the house and i lived next to bell helicopter in hurst and usually we have helicopters flying over big trucks going by but this was something that really rattled the house and it it made me wonder and at that time my wife said turn on the news and then we learned that this was going on thank you very much raymond cervantes and our cbs news dallas bureau we thank you for being with us this afternoon thank you very much dan now at some point we're going to put together the three what we consider to be best pieces of amateur video that we have the one that we showed uh earliest in the day the earliest we had uh from the dallas fort worth area we put that together with the second one from down in central texas which would be looking north and and to the east it was to the northwest of the actual explosion and then the third one put together here by raymond cervantes we'll try to put the three of them together for you at some point we were speaking of debris let me point out that debris from space shuttle columbia now has been found over a wide swath of central and east texas many of the reports center in macadochis in deep east texas about 135 miles northeast of houston the police there say reports of small pieces of debris came in all morning one

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pieces of debris came in all morning one man around the barber shop there said he'd seen a pretty large piece of debris a v-chunk shape of metal was found in the median of u.s highway 979 that's just northeast of palestine texas in nacogdoches that would be in anderson county palestine texas and anderson county that's about 60 miles 50 60 miles west of nacogdoches anywhere around palestine debris was found debris was also found in cherokee county just west of nacogdoches and in russ county just to the north cherokee county sheriff james campbell said debris ranged from small pieces of what he called tile to two foot square pieces of metal now in rice texas in navarro county by navarro county is maybe 115 miles from nacogdoches and about 40 miles southeast of dallas authorities circled off a small rectangular piece of metal that they believed was tile from the shuttle rush mitchell they're going to be collecting pieces of this for days to come and not only it appears in southeast texas but over in louisiana and possibly in arkansas as well that's right and again if you see this stuff you shouldn't touch it this according to nasa because it could be very dangerous we have a timeline now as you as you take a look at some of the debris that fell i believe this is in east texas earlier today again february 1st let's go back to 8 15 this morning this is eastern time columbia fired its breaking rockets and streaked toward touchdown nine o'clock mission control lost all data in contact with the columbia crew just after nine o'clock residents of texas arkansas and louisiana reported hearing a big bang and seeing

flames in the sky 9 16 a.m was when columbia was scheduled to land at 9 29 nasa declared an emergency at 9 44 nasa warned residents to stay away from possibly hazardous debris 11 o'clock nasa lowers the flag next to its countdown clock at cape canaveral florida to half staff and at 205 this afternoon again

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again eastern time president bush spoke to the nation and said colombia is lost there are no survivors russ mitchell president bush spoke to the nation within the last hour uh shaken and as we all have been by this and solemn here's some of what the president of the united states had to say these men and women assumed great risk in the service to all humanity in an age when space flight has come to seem almost routine it is easy to overlook the dangers of travel by rocket and the difficulties of navigating the fierce outer atmosphere of the earth these astronauts knew the dangers and they faced them willingly knowing they had a high and noble purpose in life because of their courage and daring and idealism we will miss them all the more all americans today are thinking as well of the families of these men and women who have been given this sudden shock and grief you're not alone part of what president bush had to say the nation less than an hour ago and thinking about what happened today our minds went back to that day on january 27th 1967 when there was the terrible accident on the ground as the experiments were just beginning what's now become known as apollo zero the very first of the major experiments that led to the apollo program which eventually led to the moon and virgil grissom known by everyone is gus grissom a popular astro model of the day he died in that on the ground tragedy fire they couldn't get out of the

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fire they couldn't get out of the capsule and what he said that day echoes and resonates today and i quoted this was the astronaut who died in 1967 speaking just before he went into the capsule which was to be his tomb if we die we want people to accept it we're in a risky business and we hope that if anything happens to us it will not delay the program the conquest of space is worth the risk of life gus grissom in nineteen sixty seven we recap quickly now for those of you who may have just joined us uh president bush addressed the nation of the white house about the space shuttle the president said quote the colombia is lost there are no survivors he said the astronauts assumed great risk in the service to all humanity and that the cause in which they died will continue quoting scripture president bush said the same creator who names the stars also knows the names of the seven souls we mourn today the crew of the shuttle columbia did not return safely to the earth but we can pray that they are safely home unquote the president earlier nassar administrator sean o'keefe said it's a sad day for the astronauts families and for the nation o'keefe said there's no indication that this was caused by anything or anyone on the ground he said that the loss of what he called this valiant crew is something they will never be able to get over nasa the families and the nation mission control lost contact with the shuttle just minutes before it was to land this morning at 9 16 eastern time at the kennedy space center in florida cbs news space consultant bill harwood has reported here on our air that various sources tell him and keep in mind harwood is really connected to space program has deep and excellent sources that he quotes these sources saying the problem quote could have been we want you to underscore the word could have been some massive structural failure in the shuttle's left wing now that's speculative that's true this

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now that's speculative that's true this is a fact that in the very early parts of the investigation some concentration is being given to the left wing of the shuttle perhaps there'll be more about that later either sooner or later now coming up at three o'clock just a few minutes from now maybe about six minutes from now the national aeronautics and space administration is to have a press conference that in quotation marks if you will that is it will have a news conference in which reporters will be allowed to ask questions and perhaps there'll be some more information when that happens we will carry that live here at cbs news senator kay bailey hutchinson the senator from texas and the senior senator from texas is in our dallas bureau and she heard about this morning's disaster senator if you're there thank you for being with us you bet dan it's good to talk to you and give us your thoughts if you will tell us where you were what you saw and heard what you

thought well i was walking in my neighborhood this morning with my neighbor and we heard what we thought was a sonic boom but i had heard those before because we have f-16s that are training uh all around this area so i certainly heard the sound barrier broken before and i thought that's what it was uh it wasn't until i came home and turned on the television about 15 minutes later and then i learned of course what i had heard was not just a training mission but a horrible tragedy for america when you say you're home hunters so many people do not know that your home is in dallas or in the dallas area yes i live in dallas and i was walking in my neighborhood in dallas senator inevitably they're going to be calls from people who say listen we've we've been pushing the envelope too far for too long and that not necessarily we need to cut back on the spending for nasa but that we need to to slow down in the manned exploration of space do you agree with that at least as a starting proposition or not

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as a starting proposition or not absolutely not we cannot walk away from our commitment to space research dan this has put us in the forefront of technology for our national defense our whole satellite communication systems up in space are our quality of life with mris and cat scans all this came from our space research if we're going to maintain our superiority in national defense for the world we cannot walk away from our commitment to nasa and how are we going to pay for it we must fully fund the missions that are our future missions we cannot skimp like we have uh over the past few years uh if our mission is so watered down that we can't accomplish what we're trying to do then we're throwing good money after bad we need to make the commitment we need to say we are going to stay in the forefront of space technology we are going to be in the forefront of the medical research that is done in the microgravity conditions which might find the cure to breast cancer and prostate cancer and we're going to fund it at a level where we can do the job right it's the same thing as we do in national defense and homeland security there are just certain things that you can't do with a shoestring budget and we've got to make that commitment and do it right senator kay bailey hutchinson senior senator from the state of texas thank you very much for being with us today dan thank you for the coverage we we certainly appreciate all you all are going through and appreciate what you're doing thank you senator bye we're standing by for nasa to open its second news conference of the day actually the first was a news conference of sorts and which the nasa leaders spoke about what they were going to do about the investigation offered condolences to the families

[05:18:00 \(https://www.youtube.com/watch?v=dWC7VAB3gf8&t=19080s\)](https://www.youtube.com/watch?v=dWC7VAB3gf8&t=19080s)

offered condolences to the families questions that was not a question and answer session it wasn't designed to be nor should it have been but coming up we think in a few moments roughly at the top of the hour there's going to be a news conference put on by nasa in which they'll be open to some questions but i'm reminded that the port alfred lord tennyson writing more than a hundred years ago long before humans went into space wrote something that could have been written about all the astronauts when tennyson wrote and i quote for i dipped into the future far as human eye could see saw the vision of the world and all the wonder that would be end quote russ all this talk at this hour about the future of the space program brings me back to what president bush said in his talk to the nation about an hour ago in speaking of the fallen heroes he said the cause in which they died will continue as we heard senator hutchinson say there and the president united states the space program will go on how it will go on the political ramifications of what will happen at this point are yet to be determined but you've got folks the highest level saying the space program will continue well senator hutchinson sort of gave us the edge of the wedge when we spoke to her a few moments ago saying look there's some things where we can't skimp national defense is one homeland defense is another and she listed the space program as yet another there's bound to be russ and it doesn't take an expert to understand because we've been through some of this before they're bound to be voices who say look we have to get maximum value for dollar and to get maximum value for dollar yes we must continue space exploration we need to put more of our money into unmanned exploration of the sort that lands mechanical devices on mars of the sort that goes you know far out in our own universe and even now beginning to give us a peep i just a little people in the universe beyond there's going to be a clear set of arguments between those who say

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arguments between those who say listen go to the unmanned flights in so far as possible and those who say well yes we are in favor of doing some of that but with them you have to have a continuing human element going into space otherwise you're going to fall behind emerging space powers such as china to say nothing of those that already exist with russia the debate is bound to get pretty heated indeed it will as we await the beginning of this nasa news conference the one which questions and answers are expected we want to bring you up to date on tomorrow's headlines but just before doing that for those of you who may be tuning in to see the bob hope chrysler classic the golf classic cbs sports will be bringing that to you a bit later on right now and we know you'll understand cbs news coverage of the shuttle disaster continues uh the shuttle is gone the astronauts did not survive and we are awaiting now a nasa news conference so those of you who've tuned in for the tournament know you'll understand we'll have it as the

END